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MASTER'S THESIS

The discourse of environmental children's literature – teaching environmentalism and sustainable thinking in the classroom

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MGBEN550

Teacher Education and Training 1-7

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We confirm that the work is self-prepared and that references/source references to all sources used in the work are provided, cf. Regulation relating to academic studies and examinations at the Western Norway University of Applied Sciences (HVL), § 12-1.

Abstract

In this master's thesis we study the topics of environmentalism, sustainability, and environmental education. We wish to find ways of working with these topics in the primary school classroom and have chosen to use fictional literature as its benefits are well documented. We analyse five selected children's books pertaining to nature: Eric Carle's *The Very Hungry Caterpillar* (1969), and *The Tiny Seed* (2005); Jen Cullerton Johnson's *Seeds of Change: Planting a Path to Peace* (2010); Colin Dann's *The Animals of Farthing Wood* (1993); and Piers Torday's *The Last Wild* (2013). The aim is to use Critical Discourse Analysis in order to identify how nature is portrayed in its relationship with humans, as well as to ascertain whether the author's ideology can be found hidden in the text. We find that most of the books show clear signs of the authors being very critical to some aspects of human society, industry, and philosophy towards nature. Afterwards, we discuss how one might use these books in an educational setting, specifically in order to teach each grade about sustainability and environmentalism. Each book can be used to create a space where positive, environmentally sustainable attitudes, and relevant knowledge can be imparted to the pupils, which will hopefully inspire them to become more conscious of their impact on the world they live in.

Sammendrag

I denne masteroppgaven studerer vi tema som miljøvern, bærekraft, og miljøundervisning. Vi ønsker å finne måter å arbeide med disse temaene i grunnskolens klasserom, og har besluttet å bruke skjønnlitteratur, siden fordelene ved dette er godt dokumentert. Vi analyserer fem utvalgte barnebøker som vedrører naturen: Eric Carle's *The Very Hungry Caterpillar* (1969), og *The Tiny Seed* (2005); Jen Cullerton Johnson's *Seeds of Change: Planting a Path to Peace* (2010); Colin Dann's *The Animals of Farthing Wood* (1993); og Piers Torday's *The Last Wild* (2013). Målet er å bruke kritisk diskursanalyse for å identifisere hvordan naturen er fremstilt i sitt forhold til mennesker, samt å fastslå om forfatterens ideologi kan bli funnet gjemt i teksten. Vi finner at de fleste bøkene viser klare tegn til at forfatterne er svært kritiske til enkelte aspekter av menneskelige samfunn, industri, og filosofi mot naturen. Videre diskuterer vi hvordan en kan bruke disse bøkene i undervisningssituasjoner, spesifikt, hvordan en kan lære hvert klassetrinn om bærekraft og miljøvern. Hver bok kan benyttes for å skape rom der positive, miljømessig bærekraftige holdninger og relevant kunnskap kan formidles til elevene, og som forhåpentligvis vil inspirere de til å bli mer bevisst på innvirkningen de har i verdenen de lever i.

Acknowledgements

We would like to acknowledge everyone who has helped us along on our scholastic journey up to this point. We give thanks to our lecturers, and give special thanks to our supervisor Martin Padget for his help as an instructor and for his continued support in our writing of this thesis. We would also like to thank Per Elias Drabløs for his technical and academic input, as well as our other parents and siblings, grandparents, aunts and uncles, and extended family for always being supportive.

This thesis has been the culmination of our academic voyage up till this point. We have gained a deeper understanding of what it takes to be a researcher, and we applaud anyone who is able to do this full-time. As for us, we have learned much of what we wish to do in our careers as primary school teachers, and how we wish to teach the subjects of environmentalism and sustainability.



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1. Introduction

Daily life on Earth is currently in a transitional period. The global climate is changing rapidly, and the effects are only just now being felt. We know that the world the next generation will live in will be fraught with peril on another scale compared to what we experience today, and we two authors wish to help counteract this negative future through teaching. Although we are not under the illusion that this master's thesis will change the world, it is written in the hopes that it can have a positive impact on how children are taught about the subjects of environmentalism and sustainability. It is of our opinion that fictional literature is a key tool in the early stages of the process of educating children about such topics.

In our times, there are few issues more widely discussed than that of global climate change and the ecological destruction our species has wrought. UN climate reports foretell of the disastrous consequences that await us in the future as a result of human-induced climate change. Many damaging shifts are already irreversible and will be observed for centuries to millennia (United Nations, 2021). Extreme weather events are currently happening in large parts of the world, experienced in ways such as tropical cyclones, extreme floods, rising sea levels, blazing wildfires, desertification, and drought (World Meteorological Organization, 2022, p. 3-4 & 16). The effects of such destruction are vast, and mostly felt in developing countries. Agriculture, clean drinking water, housing, animal populations, and plant life will all be negatively affected by the increase of global temperatures (United Nations, 2021). It is imperative that our generation, as well as the coming ones, work towards mitigating these problems, while dealing with their ramifications.

In this thesis, we will explore the differences and relationships between topics such as environmentalism, environmental children's literature, and ecolinguistics. These explorations into the world of linguistics pertaining to nature will give a better foundational understanding of how we as readers interact with the texts. This is highly valuable when we as teachers go on to instruct the children who need our expertise to filter and formulate difficult concepts into information that is more easily digested by their young minds.

The two of us have decided on this topic because we wish to be aware of how a teacher could present the subject in a primary school setting. From our limited experience in teaching practice, we see the need for teachers to be prepared to educate the children who will be growing up in the world as previously described; after all, we will soon be teaching on a full-

time basis ourselves. We wish children to see nature as something beautiful and something that needs to be preserved, not only because we are so severely dependent on it for our own survival, but also because nature has an inherent value which cannot be quantified (Næss, 1996). Our wish is to instil such a mindset in our pupils, as well as researchers and prospective teachers who read this paper.

In order to be of aid to the teachers who want to use literature as a tool in their quest to teach their pupils about this topic, we have decided to discuss how one might do so using five carefully selected books. These books are well regarded in the literary community and lend themselves well towards our goal. In this thesis, we will be analysing these books through an ecolinguistic and literary critical perspective, before we explore didactic options for how to make use of the books in the primary school classroom.

1.1 Background

Growing up in Norway, we two authors have had the great pleasure of living in what is considered by many people to be the most beautiful natural scenery on earth. Being among the nations with the highest number of fjords, housing acres of bristling forests, wild running rivers, snow peaked mountains, blooming valleys, hulking blue glaciers, and ice clear inland lakes, Norway's diverse and dynamic landscapes can be truly spectacular. Being immersed in this picturesque scenery every day as a child will instil a great fondness for non-human life; we can both attest to that. The school system adds to this, guaranteeing an abundance of time spent in the great outdoors, which is especially gratifying if you live outside the city.

Although we spent our childhoods in different cities, we can both draw similar pictures of our upbringing when we look at the time we spent in nature. We both swam in lakes, hiked around mountains, gathered berries and mushrooms in the forest, and remember views from great heights. We went skiing in the winter, and on boat rides in the summer. This love of nature is what inspired us to choose this topic for our master's thesis. Depriving the children of the future from having the same experiences as we have had, is a grave injustice we wish to oppose. Global warming and environmental destruction pose a great danger to Earth's natural features. This is not only dangerous for our survival, unfair towards the next generations of humans not yet born, but also economically unsustainable and unethical in terms of the treatment towards nature.

It should be pointed out that we, the authors of this thesis, have had our entire education on the subjects of environmentalism and sustainability mostly within Norwegian culture. Our consciousness towards the subjects has been entirely informed by us growing up in a certain school system with its unique values and customs, meaning some of what we write could be viewed differently by readers coming from other parts of the world. How lessons are structured in Norway are not necessarily equivalent to how they are structured elsewhere; readers from the United States, India, Argentina, and other cultures, may therefore not wholly understand nor relate to how we explore pedagogical options in the classroom.

1.2 Research questions

Our aim is to use five relevant books when educating pupils through the course of their years in primary school, in accordance with their grade. In order to guide our research, we have decided upon the following research questions:

How is nature, and its relationship with humanity, portrayed in the following books: Eric Carle's *The Very Hungry Caterpillar*, and *The Tiny Seed*; Jen Cullerton Johnson's *Seeds of Change: Planting a Path to Peace*; Colin Dann's *The Animals of Farthing Wood*; and Piers Torday's *The Last Wild*?

and:

In what ways can teachers use these books to teach primary school pupils about environmentalism and sustainability?

The formulations of these research questions were constructed in order to help structure our thesis. For the first question, we wish to examine these books and analyse the key features that pertain to humans' relationship with nature, in order to inform our further analysis into the next question. The aforementioned books were chosen because each book's intended audience is in accordance with the specific grades of primary school. This means that *The Very Hungry Caterpillar* applies to the 1st grade, while *The Last Wild* is appropriate for 7th grade pupils. Each individual book has its own unique advantages, which we will explore later. It can be helpful for teachers to know when and how to use these books in the classroom; this is why we have elected to structure the research questions this way.

2. Theory

In this part of the thesis, we will discuss the theory that lays the groundwork for our later analysis of the books. We deem it important for our readers to be familiarised with the theory, terms, and concepts we discuss in order to obtain a more holistic understanding of the subject matter. As well as delving into terms such as environmentalism, we are also going to discuss theory around environmental children's literature, as well as theory regarding classroom application for environmentalism and sustainability. While some of the theory and concepts we are about to discuss are derived from American and other English-speaking sources, we have applied them to a Norwegian school context.

2.1 Environmentalism

At the outset of this discussion, it is important to clarify that the definition of environmentalism we are using is in relation to the advocacy for protection of plant- and wildlife, i.e., nature. We feel the need to state this because in both the Oxford and Merriam-Webster (Merriam-Webster, 2022) dictionaries, the first definition of "environmentalism" that appears is in relation to the dichotomy of whether the development of groups or individuals is caused by hereditary factors, or by the environment. The definition of environmentalism we are using is the second one:

Concern with the preservation of the natural environment, especially from damage caused by human influence; the politics or policies associated with this. (Oxford English Dictionary, 2022)

Environmentalism, as a concept, is not a novel one. Humans have since ancient times had a predilection towards conserving nature (Weyler, 2018). Reverence for the primaeval, plant life, and wild beasts has compelled humans to offer sacrifices, worship gods, and protect against foreign influence that seeks to despoil that which provides the bounty they are so reliant on. Almost every pantheon of pagan gods has had a deity dedicated to some aspect of nature. The ancient Greeks had Artemis, the goddess of the forest, beasts, and hunting; Poseidon, the god of the sea; Persephone, the goddess of nature, vegetation, and spring. Equivalent examples exist within the Egyptian, Norse, Roman, and Sumerian pantheons.

Environmentalism, with its goal of protecting nature from human interference, might be said to have started 200 years ago, when efforts to stop wealthy individuals and groups from hunting endangered animals to extinction, became an initiative for people to follow (Boca & Saraçlı,

2019, p. 1). The concept of loving what is natural over what is manmade, can be seen all the way back in ancient Greece, with philosophers like Diogenes the Cynic, who loathed society, even stating that he wished to be thrown back into nature to be devoured by animals and smaller creatures when he died. There is also the Romantic period to consider, where nature's beauty was pushed to the forefront of art, literature, and philosophy. One of the figureheads who inspired this philosophical movement, Jean-Jacques Rousseau, argued for a kind of "return to nature" by rejecting civilization, which he believed cultivated corruption and vice: "Let us conclude that, wandering in the forests, without industry, without speech, without dwelling, without war [...], savage man, subject to few passions and self-sufficient, had only the sentiments and enlightenment appropriate to that state; he felt only his true needs" (Rousseau, 1754/1987, p. 57).

In its more modern iteration, the environmentalist movement has taken a stance that is largely focused on the global scale of nature conservation. This is likely as a response to the widespread knowledge that human induced climate change is having a devastating effect on all plant- and wildlife globally. Few things factor more towards the destruction of the environment on Earth as a whole than this current crisis. This broadening of perspective has influenced how activism can be performed. Buying your groceries from local producers, advocating for the protection of rainforests, and donating money to environmental charities all serve the same greater cause, where the activism of the past would encompass things like fighting local pollution or wildlife degradation (Weyler, 2018). Making the issue larger has made smaller actions more significant.

One can, by and large, split the environmentalist movement into two camps. What distinguishes them is their ideological reasons for wishing to protect the environment. In their book, *Varieties of Environmentalism* (1997), Guha and Alier describe these sides as the environmentalism of the "South" and the "North", or "the environmentalism of the poor" and "first world environmentalism". The reasoning behind the name choices here stems from the researchers basing most of their findings from the USA and India, two countries that are very culturally and ecologically different, but most importantly, in different stages of economic development (Guha & Alier, 1997, p. 17).

Although the previously mentioned article has been useful to us in discerning what branches of environmentalism exist, we do not agree with the names the authors use to characterise them. We do not think the divide between the people of the first world and poor people is clear cut enough to justify such terms being used as labels for each side. Portraying it as a divide between

north and south, is also not good enough of a distinguisher in this dichotomy. We would rather use the terms *ecocentric* and *anthropocentric* environmentalism, as in centred around ecology or anthropology. It is of our opinion that these terms are more descriptive for each position and have fewer connotations to factors outside of the topic at hand. By *ecocentric* we mean that the ideology feeding the activism holds the view that nature's value is independent of humans; that it has a right to exist as more than a resource for human consumption and that it is immoral to raze it in the name of technological, industrial, or economic progress. Destroying planet Earth is an evil in its own right, not just because it would also be the end of our lives.

Anthropocentric environmentalism means that the environment is important because it is necessary for human existence. Destroying the environment would condemn people to the same fate. To the anthropocentric environmentalist, the conflict is connected to the necessary means of survival. The nature-based conflicts in India described in Guha and Alier's book are mainly about industrial development ruining the lives of the poor population who cannot live in the conditions left by the trampling forces of resource procurement: "They are played out against a backdrop of visible ecological degradation, the drying up of springs, the decimation of forests, the erosion of the land. The sheer immediacy of resource shortages means that direct action has been, from the beginning, a vital component of environmental action." (Guha & Alier, 1997, p. 17).

As stated, environmentalism is about preserving nature. Neglecting our duty to do so could have disastrous consequences; what happens when nature's equilibrium is disrupted? Ecosystem collapse is a phenomenon that occurs when there is a significant loss in biodiversity, or the ecological processes are altered in a considerable manner, within an ecosystem (Bland et al., 2018, p. 29). When this happens, the system is no longer able to maintain itself, which then might result in an ecological collapse. When an ecosystem experiences a change or strain, it is generally able to rebound or evolve in order to accommodate this change, but this is only within a certain threshold. This threshold, or "tipping point", is determined by an ecosystem's "resilience". If the ecosystem loses its defining characteristics, or is replaced by a novel ecosystem, this is also considered ecosystem collapse (Bland et al., 2018, p. 30).

Ecological collapse might happen when humans exploit or strain ecosystems beyond said threshold. Some of the literature we have chosen to analyse in our thesis will show environments where ecological collapse has taken place. When this happens, soil, freshwater, air quality, or biodiversity, deteriorate beyond what can be recovered naturally. After this

"tipping point", humans cannot reliably or sustainably extract the goods and services we are usually provided by nature, and which are essential for our continued prosperity (Global Challenges Foundation, 2023). Access to crops which form the basis of all our nutritional needs, air that does not damage our lungs as we breathe, and water that does not contain harmful substances, are all basic human rights. We are still very much reliant on nature for both energy and shelter. Exploring these ideas in books and discussing them with children is a great way of showing the multiple aspects of environmentalism's goals.

2.2 Environmental children's literature

Children's literature with environmental themes has become increasingly common over the last few decades. *The Lorax* (Dr. Seuss, 1971) was, in many ways, the start of environmental children's literature. It has been followed by numerous works, with some more successful in conveying an environmental message than others. We believe that environmental children's works are gold mines in terms of educating children on this crucial topic. In this section, we will be exploring existing research on the matter of environmental children's literature. Hereafter, the term *environmental children's literature* will be referred to as ECL for the sake of simplicity.

The Lorax (Dr. Seuss, 1971) was one of the first works to attempt to convey a modern environmental message to a younger audience. In many ways, it proved successful. It was well received among children, as well as among parents and teachers. In fact, it was listed in the National Education Association's online survey Teachers' Top 100 Books for Children (National Education Association, 2007). What about this book made it, and continues to make it, so compelling to younger and older audiences alike? In an article, Matthew Teorey (2014) argues that Dr. Seuss' The Lorax succeeds in its popularisation of the environmentalist message, where his contemporaries, such as Wallace Stegner, fail. The article draws a picture of two writers working towards the same goal of engaging readers towards environmental action, stressing many of the same points, and reaching the same conclusions, but only one of the works made a mark on the public. One of the differences pointed out in Teorey's article was that Stegner, in his article "Conservation Equals Survival" (1969), only targeted adults when advocating for environmental action, while in "Child of the Far Frontier" (1998), children were encouraged to enjoy nature like a "savage" in the woods. Seuss understood that by making his young readers activists in the early years, this would have a lasting effect on their

consciousness towards environmental activism. It is his style, language, pictures, and narrative that made an impersonal, dry, and distant issue something the public cared about. It infects the reader's imagination, and as the message takes root, an ecologically conscious citizen is born (Teorey, 2014, p. 328).

There is an argument to be made that fiction is better than factual writing at swaying public consciousness about topics such as environmentalism. When a person is given a spreadsheet about all the dangers of deforestation or pollution, the issue can become faceless, cold, or statistical; something that is hard to care about, as there is nothing to emotionally connect to. The reader needs to make the emotional connection themselves. If they cannot, the issue stays impersonal and a distant problem that may or may not affect them. When the issue is presented within a narrative, where it affects characters, the emotional connection comes naturally. In *The Lorax*, the destruction brought by the Once-ler drives the animals out of their homes, all of whom are drawn with very expressive faces, crying, hungry, and coughing. Through the illustrations, the environmental issue is given a face you can empathise with. When the fictitious land's megafauna goes from vibrantly coloured, grinning teddy bears to crying and starving figures carried on stretchers, the readers are compelled to empathise with the environmental cause (Teorey, 2014, p. 329).

From the perspective of a child, there are many positive aspects to the book. The illustrations are riveting and immerse the reader in the fictitious world that Dr. Seuss creates. The use of rhyme throughout adds to the experience, in that the humorous way the words are pronounced sounds odd in a good way, while also making it easier to follow the story. Teorey (2014, p. 330) likens the "villain" of the book, the Once-ler, to an arrogant adult who disregards the whims and opinions of the Lorax, who Teorey compares to a child. Children can empathise and relate to the Lorax, because he behaves similarly to how a child would behave. The book, through its titular character, promotes the ecosophy of *deep ecology* (Næss, 1996; Drengson & Inoue, 1996), which is the idea that flora and fauna have an intrinsic value beyond use as resources for humans. This resonates with children, as they are fonder of playing in nature and generally more in awe of the wonders of the world, compared to adults. Another of Dr. Seuss' smart choices, is to never show the Once-ler's face, which has multiple benefits. For one, when contrasted with the incredibly expressive faces of the fauna found in the illustrations, the reader has no reason to side with the Once-ler. Being able to see one another's face makes one much more likely to empathise with them. Him being faceless can also be seen as symbolic of how

some faceless corporations have no sympathy for the victims of their actions (Teorey, 2014, p. 330).

The book's ending is open-ended, which encourages the reader to think of their own ending. This is useful for children, since they are given an opportunity here to be part of a solution that promotes the preservation of the environment (Teorey, 2014, p. 336). This aspect of the book can, however, be critiqued not for its intention, but for its lack of specificity and clarity. Echterling (2016) has some interesting insight on the themes of ECL, which is relevant here. This will be explored further later.

From a teacher's perspective, *The Lorax* has clear benefits. The rhyming is beneficial in terms of educating children in the English language itself, and does so in an entertaining way to help keep the children engaged. It is useful in educating children about nature itself, and more specifically about energy resources and sustainability. As Dr. Seuss made up many of the words used in the book, it could also be useful in a fun session for the pupils where they explore language. The book is relevant to multiple aspects of the curriculum, and it is therefore small wonder that teachers rate it highly.

When viewed under a more (eco)critical lens, *The Lorax* does have some shortcomings. The book has a rather narrow focus, in that it is set in one place with only a few characters. This in itself is not a problem; many, if not most, children's books are set up this way. It often makes for a more engaging plot where it is easier for children to follow along. From an ecocritical perspective, however, the book could do more. The book does not so much condemn industrialisation, capitalism, or the systems that contribute to ecological destruction, as it condemns the vice of greed. The Lorax is clearly supportive of the environmentalist movement and attempts to instil a love and appreciation for nature in its readers, but it stops short of calling out the underlying destructive forces in society that make the topic of environmentalism necessary for the survival of life on Earth. The book touches on the subjects but merely provides an individualistic view which, while perhaps narratively engaging, omits important advice concerning how one can truly make a difference beyond simply appreciating nature. This can be excused on the basis of it being written at the earliest stage of the global effort to conserve nature, and before global warming was a widely known issue. This does however not preclude it from being critiqued, nor give it a pass for its lacking very important elements if it were to be used in the classroom. It should be mentioned, however, that some later editions of the book contain an appendix with calls for more worldwide environmental action.

Echterling (2016) argues that most contemporary ECL focuses too much on the individual and lacks a political and civic focus that could better prepare children for the future (p. 283). This is a problem, and it stems from the harmful ecolinguistic discourse purported by decades, even centuries, long industrialism and capitalism. The discourse presented in our society is, as we will explore further later, so ingrained in our daily lives that it is hardly noticeable. This also, in turn, affects the environmentalism that is presented to children in young adult literature. Starting at a high level of the US government, the Environmental Protection Agency's (EPA) youth-oriented website on climate change has an individualistic focus on environmentalism. It encourages students and young people to "think like scientists", and "be part of the solution" (Environmental Protection Agency, 2014). However, this website stops short of providing means to any meaningful change.

The cause of this refusal to call out industries and governments on their dominant role in causing ecological decline, is multifaceted. A simple answer would be that the EPA, and other organisations like it, do not understand that the discourse they are portraying, or not portraying, has a harmful effect. It can be argued that it is so ingrained in our way of life, that they do not see the issues within. This is a thin defence, however. People in positions of power come across as smart and educated; they are able to see the relationship between cause and effect. It is in the view of this thesis' authors that they know their actions are expediting ecological decline. The governments and higher-ups in industries do not admit to this knowledge, because doing so would make them accountable for their own actions. As Stibbe (2014) states, people do not want to knowingly contribute to negative consequences, so they simply deny it (p. 122). Also, changing the discourse and, in turn, their own actions, would likely lead to decreased profits for them. We will explore these topics of discourse and ecolinguistics later.

The previous paragraph is somewhat of a digression, though the subject of willing blindness to the cause of ecological decline does set a certain standard for discourse in our society. ECL is written by authors in this society, who have naturally, though implicitly, been adversely affected by this discourse. This is part of the reason why so many environmental books for children have this individualistic focus on environmentalism. Echterling (2016) argues that there are two forms of youth environmentalism, with the first one, centred on individualism and what can be accomplished in the private sphere, being the most prevalent in ECL. The second form is far rarer in ECL; this form of youth environmentalism sees children as political subjects where they are able to affect changes on a large scale by, among other things, sending

letters to politicians and arranging petitions (Echterling, 2016, p. 286). We have elected to call these two forms of environmentalism *private environmentalism* and *social environmentalism*.

One could argue that children's picture books on environmentalism should be simplified, elsewise the target group would not grasp the subject at all. Therefore, the subject matter should be boiled down to concrete actions a child can understand and perform. Sometimes, an author of ECL has the goal of simply planting a seed of hope in their young readers' mind, and not to promote any sorts of environmental efforts. In these cases, it is important to note that just because environmentalism is not an explicit topic of the book, reading it can still have an impact. When the goal is to promote environmentalism, however, we should ask ourselves if we are underestimating the intelligence of children. Can they grasp complex political questions and understand the far-reaching ramifications of climate change? The iMatter campaign (since renamed Climate Generation), who among other organisations filed a suit against the US federal government for their failure in addressing ecological decline (Climate Generation, 2014), is mostly comprised of children and young adults. Their discourse, consisting of words like "short-term" and "future", makes it clear that children understand the full-scale problems of climate change (Echterling, 2016, p. 286). Perhaps the argument that children only understand the damages of ecological decline in their own immediate sphere does not hold water, and should not impede ECL authors in creating more climate justice-oriented (Damico et al., 2020) works.

The term *climate justice* essentially describes how climate change affects different communities and social classes, and how unequal power relations in our society mean that the poor and unprivileged among us suffer most from the effects of ecological decline. The fact that the people most affected by the change have participated minimally in it, makes it even more unjust (Damico et al., 2020, p. 688-689). The theme of climate justice is not common in ECL; Echterling (2016) goes on to say that ECL usually glosses over the theme of climate justice in its works (p. 290). ECL often takes a multicultural, "one world" stance where everyone has to work together to stop climate change; everyone shoulders equal responsibility and joyful cooperation is key (Echterling, 2016, p. 290). This is a reductive way of examining ecological issues and undersells the effect that the richest and most powerful have on the environment. Climate justice is really climate *injustice* (Damico et al., 2020, p. 688).

We have briefly looked at *The Lorax*, where we have examined its flaws and upsides. We will now be examining a few more examples of ECL that solely portray what we refer to as *private*

environmentalism, seeing what they do and what they could do differently. In We Are Extremely Very Good Recyclers (Child, 2009), a picture book, we find Charlie and Lola. Charlie teaches Lola that instead of just throwing garbage away, it should be recycled. He says that if everyone just threw garbage away, then the whole world would overflow with it. Recycling is a way to reuse old things and to make them "new-ish", Charlie explains. The book goes on to show Charlie and Lola getting all their friends at school to recycle, and it becomes a craze of sorts. The end of the book even features a recycling tracker for its readers, so they too can participate in this activity. Echterling (2016) argues that the actions and thoughts of the characters in the book demonstrate their "inability to think outside patterns of consumerism that necessitate recycling in the first place" (p. 289). Instead of questioning why industries cannot produce biodegradable waste in the first place, Charlie and Lola automatically assume that recycling must be the answer. Mickenberg and Nel (2011) state that these kinds of texts "can make recycling an end in itself, and foster a self-congratulatory mindset" (p. 457). This book, while environmentally conscious, could do more to encourage meaningful action and a political mindset in its readers.

The Magic School Bus and the Climate Challenge (Cole, 2010) exemplifies some climate justice issues. The teacher in this book tells her pupils that the only chance to save the Earth "is to work together - every person, every city, every country [...] We <u>all</u> need to take care of our earth!". It goes on to say that one person cannot make a big difference, but "millions of individuals can!". The book *Global Warming* (Simon, 2010) continues the theme of equal responsibility for unequal actions, stating that "climate change impacts all of us". While this is true, the most unprivileged are of course affected significantly worse than the rest of us (Echterling, 2016, p. 290).

Environmental agendas are hard to push through in legislation anywhere, but perhaps especially in the United States. It is one of the most predominant denialistic countries in the West, meaning that a large portion of the population deny that climate change is even real (Damico et al., 2020, p. 688). Along with the rise of neoliberalism in the 1980s—an ideology that favours industry and individualism with limited government oversight (Monbiot, 2016)—this has led to American environmentalists struggling to do anything of note on a legislative level. They have instead turned their attention to the public, where a lot of these small, individualistic ways of stopping climate change have emerged (Schneirov & Fernandez, 2013, p. 171). This has naturally bled into ECL, where many of the authors are indeed American, and

has pushed this narrow-minded agenda through to children. This impacts the EFL classroom in Norway as well, as the literature read here is often from the same authors. More must be done to prevent ecological decline; actions in the private sphere suggested by most ECL are simply not enough.

In Let's Celebrate Earth Day! (2001), Roop & Roop take a somewhat different, yet still reductive, approach to environmentalism. In the first half of the book, some facts about American government reforms in the 1970s are presented, and the actions of US senator Gaylord Nelson in these environmental efforts are praised. The second half takes on a different tone, however, and proceeds to propagate private environmentalism by asking: "what can a private citizen do to stop climate change in their own home". Again, this is focused on the American experience, but is also highly relevant in Norway and the rest of the world. The book also seems to suggest that the government has done all it can with its efforts, and that the rest is all up to the people (Echterling, 2016, p. 291). This, as in the other books mentioned, is a damaging viewpoint that praises the government while simultaneously absolving it of any blame in the current ecological crisis. There is also no mention of how industries are wreaking havoc on the environment today, with oil drilling and coal excavation continuing to fuel the release of carbon dioxide and toxic gases into the atmosphere on a vast scale (World Wildlife Fund, 2023). The book calls for banding together and states that climate change can be combated through teamwork because "each one of us is responsible for making the best choices for the Earth every day, because every day is Earth Day!" (Roop & Roop, 2001). Climate justice (Damico et al., 2020) is clearly lacking in this book, and dilutes the issue further with its attitude of ignoring unequal power relations in our society.

The story of Nobel Peace Prize winner Wangari Maathai and the Green Belt Movement is fascinating and has been the inspiration for many works in ECL. Maathai was born in Kenya, and later moved to the United States for her studies. When she returned to Kenya, she found that there had been a huge amount of deforestation in her home country, as a result of years of intense industry by the government and private companies. She started the Green Belt Movement, a group largely consisting of women, to help replant the forests in Kenya and to oppose government interference of the environment. This is an exceptionally short version of events, and it has been retold in different ways in various ECL works. *Seeds of Change: Planting a Path to Peace* (Johnson, 2010) is one example, and has been praised for its viewpoint which challenges the government of Kenya and stands relatively alone as a

politically critical book in ECL (Echterling, 2016, p. 295). This picture book is one of the five works we have chosen to examine more closely and will be analysed in greater detail in our analysis section later.

Planting the Trees of Kenya (Nivola, 2008) is another example of a children's book representing an environmental theme through the story of Wangari Maathai and the Green Belt Movement. However, this book is problematic in some respects. Nivola writes in her book that Maathai attempts to dissuade other women from blaming the government and instead take on the blame themselves:

The women blamed others, they blamed the government, but Wangari was not one to complain. She wanted to do something. "Think of what we ourselves are doing," she urged the women. "We are cutting down the trees of Kenya." (Nivola, 2008)

This has the effect of minimising the impact on the situation while also absolving the government of blame, similar to *Let's Celebrate Earth Day!* (Roop & Roop, 2001). This oversimplification may be caused by the author's attempt to create a better narrative (Echterling, 2016, p. 293), a narrative where the community can band together and save Kenya through teamwork does, admittedly, make for a good story. However, the message the book sends is somewhat adversely affected by this decision.

Sturgeon (2009) argues that when books focus on individual heroism and great feats, as does *Planting the Trees of Kenya*, instead of critiquing government regulation and rallying to enact changes on a meaningful level, a disconnect between environmental issues and social issues occur (p. 103). We have already discussed climate justice and how unequal power relations are inherently linked to ecological decline, so it is a shame to see so many ECL works exacerbating the issue. Perhaps a reason for this could be that the minds of children are underestimated. Authors of ECL might consider it more likely that a child could empathise with an individual hero and the power of teamwork and friendship, and therefore the plot and message is oversimplified to accommodate this. Echterling (2016) goes on to argue:

This raises many questions about the kinds of information and behaviors we deem appropriate for children, and, even more importantly, our assumptions about what our children can understand and do. Why can't children be

political? Can they not begin to understand the relationships between social and environmental problems like environmental racism? (p. 294)

In ECL, children are encouraged to make a difference in small ways, and this is a good message to convey. However, it is important to not belittle the expansive problems we face by oversimplifying the message that is sent. This is of course difficult to put into a story for children, but it is not impossible.

We have previously discussed ECL works where the environmentalism portrayed has been limited to the private sphere. As mentioned, there are many issues that arise when children are only exposed to a small part of environmentalism. An issue that has not been discussed is the topic of *slow violence*, coined by Rob Nixon (2011, p. 2). The term describes the violence that nature is subjected to over a long period of time. The effects of this violence are often unspectacular and unnoticeable over a short time frame, hence the adjective *slow*. This representation of climate change is absent in most ECL works. There are, however, a few ECL works that manage to broaden the scope of environmentalism, and in such a way give slow violence more substance. We call this social environmentalism; Echterling (2016) calls this expanded notion *environmentalism beyond the home* (p. 294). These works do not oversimplify their message, nor make recycling and other trivial actions ends in themselves, but rather seek to develop a more complex understanding of ecological decline in their young readers.

Oil Spill! Disaster in the Gulf of Mexico (Landau, 2011) is a book that performs well in explaining and substantiating slow violence. It details the ramifications of the Deepwater Horizon incident, in which an oil well burst and caused what is considered the biggest oil spill in history (Robertson & Krauss, 2010). Landau describes the oil spill's consequences through various means, and explains how flora and fauna, as well as humans, have been negatively affected more than, and far longer than, the oil companies initially suggested. This explanation has the impact of actualizing slow violence and making it more clear for children what the effects of ecological decline can, and will, have (Echterling, 2016, p. 296). However, the book is found lacking in suggesting meaningful ways that children can help. It falls back on overused tropes of how one can help by decreasing one's energy consumption, instead of providing its readers with tools to enact more significant changes. Echterling (2016) sums it up well: "While Oil Spill! moves toward representations that will help children understand the expanses and challenges of slow violence, it falls short in modelling how we might address such problems" (p. 296).

Our Earth: How Kids are Saving the Planet (Wilson, 2010) is a non-fiction easy reader that highlights young environmentalists around the world. It is multicultural and inclusive, and this has the added benefit of showcasing all the different ways that change in environmental thinking can be enacted (Echterling, 2016, p. 295). It also has, like many other ECL works, a section that describes what the reader can do to help. Here is where this book is set apart from Oil Spill! Disaster in the Gulf of Mexico and most other ECL works; it goes beyond simply suggesting that one recycles more or decreases one's water consumption. Wilson suggests actions such as establishing an environmental youth club, or practising "pester power" as she calls it. This entails writing often to politicians, urging them to make meaningful legislative changes. These political actions have the potential to have a larger impact on the environment than the frequently peddled private environmentalism found in most ECL, and this sends a clear and constructive message to children.

Most ECL works have sections where the reader is instructed in what they can do to help the environment. As discussed, these sections more often have a focus on private environmentalism, as opposed to social environmentalism. *Oil Spill! Disaster in the Gulf of Mexico* (Landau, 2011) is one example of a text that falls short in providing more than tokenistic measures, but as previously discussed, there are a whole host of these texts. Some texts are written with the sole intention of bringing attention to the environment, and these should not be judged as harshly as they can still have a positive impact. No matter how environmentalism is presented to children, it is important that they are educated on the subject.

2.3 Environmental education

The foundation of this paper is the belief that environmental education is important. Since the 1970s there have been a plethora of international conferences concerning environmental education. The topics of these have often been about the importance of fostering attitudes, skills, awareness, and initiative for environmentalism among young people. The thought behind this push towards a greener classroom can be summed up in this old Chinese proverb: "If you plan for a year, plant rice. If you plan for 10 years, plant trees. But if you plan for 100 years, educate the people!"

The definition of environmental education (EE) that we will be working with is: "a collaboration of content and pedagogy that engages students in a study of the environment to encourage behavioural change and action" (Boca & Saraçlı, 2019, p. 1). Because this definition

is broad, and not limiting itself to any area within education, we are free to find our own niche within the subject to which we can conduct our study. Although we will be referring to, and studying a few of the other areas, our main concern will be within linguistics and the use of literature.

Environmental education can be divided into education in, about, and for the environment, and for our paper, the focal point is education for the environment. Education in the environment would entail an instruction on a given topic within the confines of a natural zone. The instruction does not have to be about the scenery or any of its components; this, however, would have been a natural choice. This form of teaching can be used in order to vary the classroom setting, which is a great way of breaking up the monotony that can frustrate a lot of students. Education about the environment could be held in the classroom, outdoors, or any other space. The crucial factor is that the topic is about nature, whether it is about flora, fauna, geology, meteorology, and so on. Learning about the world around us is fundamental to understanding multiple different subjects, for example the sciences, arts and crafts, and even language. There are great benefits to the other aspects of EE, but they ultimately lead to education for the environment. We will later explore how Sinnes (2021) uses these aspects as inspiration for her components for education for sustainable development.

People today are actually quite well informed about the environment, and have an interest in its wellbeing (Andı, 2020). Young people, especially, seem to be motivated in organising marches and strikes against corporations and governments when they do not take action themselves. However, many have concerns about it being too late, and that fighting against climate change is a losing battle. Climate pessimism is the belief that it is not politically, economically, or socially plausible to combat climate change (Higgins, 2022, p. 2). This belief is rising among people around the world (Clayton et al., 2021, p. 870). To counteract this, one of the goals of much of ECL is to help develop children into ecocitizens (Massey & Bradford, 2011, p. 109), which it does by portraying different forms of environmentalism. As previously explored, how effective this is can depend on how well, and on what type of, environmentalism is portrayed. Regardless, developing children into ecocitizens is an admirable goal and an area where we authors would like to contribute. We also consider this goal to be part of environmental education. Before we delve into how we could help achieve this goal, we will look at the views of the Norwegian government in regard to environmental education.

2.3.1 Ministry of Education and Research

In the Norwegian core curriculum, which all teachers need to adhere to, section 1.5 specifies the need to teach all pupils respect for nature and about environmental awareness. It states: "School shall help the pupils to develop an appreciation of nature so they can enjoy and respect nature and develop climate and environmental awareness" (Ministry of Education and Research, 2017). As humans are part of nature, we are tasked with the responsibility of taking care of it. School shall therefore help the pupils acquire the knowledge and a respect for nature, benefitting this task. It is also stated that they need to have experiences in nature in order to see its value, both as a reservoir of resources, but also for its beauty and ability to bring joy. This way, the school system will help the pupils develop the earnest wish to protect and aid nature.

Additionally, sustainability is represented in the national curriculum for Norwegian schools. Subsection 2.5.3 in the core curriculum is titled *Sustainable Development* (Ministry of Education and Research, 2017), and it refers to sustainable development as an interdisciplinary topic. This entails that the topic is not a subject in itself, but should rather be taught through other established subjects, such as English, Norwegian, and social and natural sciences. It is stated under subsection 2.5.3 that "sustainable development refers to protecting life on earth and providing for the needs of people who live here now without destroying the possibilities for future generations to fill their needs" (Ministry of Education and Research, 2017). In terms of how this affects the pupils who will be taught about sustainable development, the core curriculum states that "pupils shall develop competence which enables them to make responsible choices and to act ethically and with environmental awareness" (Ministry of Education and Research, 2017). How this manifests itself in the classroom is unclear and is left up to interpretation by the relevant figures in the individual school, be it the principal or the teachers themselves.

With this proclamation from the Norwegian department for education, all teachers are required to follow this creed of environmentalism, with a focus on fostering the right values in the children they teach. This has created a tradition for teachers to plan one lecture a week spent in nature, create rules about recycling in the classroom, and formulate discussions about the greater narratives that permeate the global socioeconomic climate, giving children a better understanding of why their voices and actions are so important to the wellbeing of both their own futures, and to the planet itself.

When putting children into the school system, the Norwegian government wishes them to come out as adults with the right values, skills, and knowledge, in order for the society they will inherit to be governed by people holding these same values. This forward-thinking strategy is very much in line with the sustainable doctrine we wish for in the debate of the environment as well. The Norwegian government is seemingly working towards a more sustainable globe, as they are creating a generation that will keep these actions in motion when they take positions of power and influence in society.

2.4 Didactics and pedagogy of environmentalism and sustainability

As we have seen, it is very important to spread awareness of terms like environmentalism and sustainability. If future generations are to live sustainable lifestyles and take care of the planet, they will need to be exposed to the relevant terms. This can be accomplished through various means; parents can explain to their children about the importance of cherishing nature, or children can read about nature in books. While these are useful methods, there needs to be a more targeted approach in order to maximise learning. This can be done through teaching children about sustainability and nature preservation; more specifically, we seek to find out how didactics and pedagogy can be used to accomplish this. This section will focus on what previous research has shown to be effective in this endeavour.

Earlier, we discussed how sustainability was represented in the core curriculum of Norwegian education. One element that we did not mention was how technological competence is depicted in the curriculum, as it is an important topic in regard to sustainability. Under subsection 2.5.3, it is stated that technology can be helpful in providing a more sustainable world, but "while technological development may help to solve problems, it may also create new ones" (Ministry of Education and Research, 2017). This statement clearly resists the ecosophy of cornutopianism (Lomborg, 2001; Ridley, 2011), which entails that technology will be so advanced in the future that it will overcome all environmental issues when it eventually arrives. This ecosophy is a passive one, as it does nothing to prevent environmental decline in its own right; it simply assumes that the problems will be solved by themselves, by someone else in the future. It is welcoming to see the Norwegian government distance themselves from the view that technology is always a solution and never a problem, and it is important that our pupils are not taught this fallacious ecosophy. We also discussed earlier that it is not stated how

teachers would go about implementing these views in a classroom; it is open to interpretation. How could teachers teach their pupils about environmentalism and sustainability?

Firstly, what is sustainability? Sustainability and sustainable development are terms we hear often in our daily lives. However, when pressed to define the terms specifically, one might struggle. Astrid T. Sinnes (2021), in her book *Utdanning for bærekraftig utvikling* [Education for sustainable development], argues that in order for development to be sustainable, the economy, nature and humanity in a society must be in harmony (p. 29). For example, economic development cannot take place at the cost of nature or humanity; if so, it would not be considered sustainable. There are differing views in society on how these developments can be accomplished in tandem, which means that how one chooses to proceed is defined by one's value system (Sinnes, 2021, p. 29). Sinnes (2021) argues that sustainable development is an inherently impossible term to define, as there is no agreement on what development even means (p. 30). Does it entail economic growth, or simply allowing nature to thrive? These are questions that are important to discuss in the classroom, as doing so can lead to a higher understanding of each other's views and values. Pupils should be encouraged to reflect on and debate these issues (Sinnes, 2021, p. 30).

We, as this thesis' authors, have the perspective that sustainability should always be geared towards protecting the environment. The earth is the only place we have to live, and we must do everything in our power to maintain and protect it. While there are disagreements on climate change and how damaging it is, we hold the position that we are heading for ecological decline with our current energy consumption and greenhouse gas emissions, and we deem this view as fact (United Nations, 2021). We therefore argue that all education for sustainable development (ESD) must be in the service of environmentalism.

Sinnes (2021) also outlines more general targets for schools to accomplish in terms of efficiently educating pupils in sustainable development. She argues that schools in Norway have failed in educating pupils in sustainable development so far (p. 16-18), and states that schools must make more of an effort of making pupils internalise that the world is changing, and that they need to learn how to adapt (p. 15). All education is essentially geared towards preparing children for the future, and she argues that all lessons in all subjects should have a sustainable component to them (p. 71). As is laid out in the core curriculum of Norwegian education, sustainable development is a cross-curricular topic that should permeate all subjects (Ministry of Education and Research, 2017). Sinnes (2021) suggests four overarching ways to

teach sustainable development through other subjects, and she classifies them as *about*, *in*, *for* and *as* (p. 69).

- 1. The *about*-component entails obtaining theoretical knowledge *about* sustainable development. Natural sciences is a subject where the pupils could learn about this topic, and could help form a better understanding of what it means to be sustainable (p. 69).
- 2. The *in*-component entails learning about sustainable development *in* the environment. Sinnes (2021) argues that excursions in nature and outdoor lessons are vital for pupils in order for them to appreciate and understand the environment they live in (p. 70).
- 3. The *for*-component entails teaching in such a way that the pupils become engaged in the topic of sustainable development, and to make them willing participants in enacting the changes they identify as necessary. This could involve teaching the pupils about how politics and consumerism affect sustainability (Sinnes, 2021, p. 70), so as to help the pupils become active global citizens in an ever-changing world.
- 4. The *as*-component is the last component that Sinnes lists. This entails making the school act *as* an arena where children can learn how to live sustainable lives in the future (Sinnes, 2021, p. 70), and as such, this is a more generalised and overarching component in and of itself.

All of these components must be incorporated in the classroom in order for effective sustainable development learning. Some, however, argue that the *in*-component is the most important for children, as being surrounded by nature develops an appreciation for it and a willingness to take care of it (Rowe, 2019; Louv, 2006). Wilson goes on to argue that children should have hands-on experience with nature, as it would lead to higher perception of environmental education (1996, p. 25, as cited in Zynda, 2007, p. 6-7). Naturalist Michael Pyle (2002) states that being in nature and the surrounding environment "triggers not only knowledge but also intimacy with nature among the young" (p. 311). It is clear, then, that there is a significant consensus among scholars on the effectiveness of being in nature, when it comes to environmental education and learning about sustainability.

One specific research project performed by Lykke Guanio-Uluru (2019) was geared towards teaching sustainability. Much of this project's focus was attempting to find a method of teaching pupils that could go towards achieving UNESCO's eight cross-cutting key competencies. In their book titled *Education for Sustainable Development Goals: Learning*

Objectives (2017), UNESCO put down a number of goals related to sustainable development that, as a society, are aspirational. Some of these goals include eliminating hunger and poverty, combat climate change, and ensure cities and communities are sustainable (p. 6). In order to reach these goals, UNESCO argues that education is key. They state that everyone should aspire to acquire eight cross-cutting key competencies (2017, p. 10) that, if incorporated effectively, could help achieve all their laid out sustainable development goals. These eight competencies are listed and described in Guanio-Uluru's study:

- 1. systems thinking competency (to recognize and understand relationships and systems)
- 2. anticipatory competency (the ability to create and evaluate visions for the future)
- 3. normative competency (ability to reflect on norms and values)
- 4. strategic competency (ability to develop and implement innovative actions)
- 5. collaboration competency (ability to learn from, work with and relate respectfully to others)
- 6. critical thinking competency (ability to question norms, practices, and opinions)
- 7. self-awareness competency (ability to reflect on one's own role in the local and global communities)
- 8. integrated problem-solving competency (ability to apply different problem-solving frameworks to complex sustainability problems) (Guanio-Uluru, 2019, p. 6)

Regarding Guanio-Uluru's study itself, she went about achieving these competencies through the use of literature circles. Literature circles are groups of students discussing particular literary works, where each student has been assigned a reading role before the group convenes (Daniels, 2002). Harvey Daniels had developed specific roles that encompass a large variety of books, but Guanio-Uluru altered these in order to shape a more ecocritical lens for the students to view literary works through. The roles given to students in Guanio-Uluru's (2019)

project were *nature scribe*, *plant and animal watcher*, *dystopian detective*, and *biotechnology detector* (p. 10). A nature scribe would read a literary work and attempt to view things from nature's point of view; how was nature portrayed, and what was the role of nature in the plot? The plant and animal watcher would see things more specifically from the viewpoint of certain plants and animals, while the biotechnology detector would attempt to ascertain if and how technology was used to affect or enhance nature. The dystopian detective looked for traits of dystopian fiction found in the work, but this is not relevant for our purposes. It is important to acknowledge that the project's subjects were student-teachers.

The results of Guanio-Uluru's project were highly interesting in a number of aspects. As the literature circles were student-driven, it allowed the students to take more responsibility in their own learning. Instead of simply being told what to do by the teacher, they needed to identify what was being learnt and how they could achieve it effectively (Guanio-Uluru, 2019, p. 8). The project also showed that using literature circles in this manner increased the participants' collaborative competency (p. 8); this is, naturally, useful in everyday life as well, not only in learning situations. It was also made clear that the student-teachers did not feel as if their teacher education had made them more proficient in their ability to understand and teach sustainability (p. 16), and even though this falls outside the scope of our thesis, this should be addressed by the relevant authorities.

Before the project started, the student-teachers were asked to fill out a questionnaire. They were, among other things, asked to define sustainability. Half of the participants "defined sustainability as the use of resources in a way that does not deplete them for future use, all specifically mentioning the future or future generations" (Guanio-Uluru, 2019, p. 13). After the project, the student-teachers filled out another questionnaire, where they again were asked to define sustainability. This time, the responses still had a focus on renewable, long lasting energy use, but the word "future" was far less prevalent (p. 13). It was clear that the participants had become more aware of the "here and now", and a typical response here was that sustainability was about "being able to "keep up" something, often in the context of taking care of the environment and making sure it does not become damaged" (p. 13). Guanio-Uluru therefore shows that, through her project, or a variation of it, participants were more focused on the present (p. 16) and how they could contribute to a more sustainable world, instead of, however unintentionally, pushing the problem away from themselves and into the future. Overall, the student-teachers were made aware of how important sustainability truly is (p. 13),

and the goal was to transfer this knowledge to their future pupils. Guanio-Uluru's project will serve as inspiration for some of what we suggest can be done in the classroom regarding teaching environmentalism and sustainability.

In the next chapter, we will discuss in more detail how we have elected to perform our project.

3. Methodology

Before the analysis of the books can happen, we need to explain our methodology. Seeing as the motivation behind our choosing this topic, as well as these books being related to the discussion of climate change, we feel it prudent to use critical discourse analysis (CDA). This is because CDA is a method for analysing media that is effective at bringing underlying agendas to the surface. Our hope is that readers of this thesis can get a better understanding of some of the choices taken when these books were written, and thereby be better suited to discussing them. We also need a way of analysing the choices made for the illustrations in some of the chosen books, and have therefore added an offshoot of CDA, multimodal critical discourse analysis, to our methodology.

3.1 Research method

Based on Susan Gass and Alison Mackey's (2015) definitions of the different methodologies one can use while doing second language research, we have deduced that our approach can be categorized as an exploratory-qualitative-interpretative approach. Qualitative research is one of the two major research methods, the other being quantitative. There is no singular characteristic that encompasses all qualitative research techniques on which one can define the field, as a wide range of different philosophies, approaches, and methods can be found within it (Gass & Mackey, 2015, p. 215). On the other hand, Gass & Mackey give multiple examples of certain characteristics one usually includes when giving a general definition. It is perhaps easier to explain what qualitative research is, by showing what it is not. It is generally not interested in trying to positively verify theories but rather attempts to observe without bias (Gass & Mackey, 2015, p. 218). The data used in qualitative studies are not easily quantified. Figures and statistics would be examples of quantified data, and are usually reserved for quantitative studies.

Exploratory entails that the research is not experimental. What one researches is not tested through experiments, but rather found through qualitative means. Interpretative entails that the research is not statistical. When the data consists of behaviour in its natural environment is subjective, or otherwise non-quantifiable, and cannot be turned into a statistic, it must be interpreted in order to be used in research (Gass & Mackey, 2015, p. 4).

Although we will not use these terms further in the analysis, we see it as prudent to acknowledge, and inform the reader what type of research we are conducting.

3.2 Critical Discourse Analysis

Critical discourse analysis, or hereafter called CDA, is something we have already mentioned in a previous segment, and it is a relatively new concept in literature and media studies. It is related to other fields such as critical linguistics, critical language awareness, discourse analysis, and social semiotics, but does however differentiate itself by its motive. With CDA being such an illusory concept, it is better to look at what is common among its uses in order to explain what it is. When one uses CDA, one is looking for hidden agendas behind the text or picture that is being analysed; what story is being implicitly told through the chosen symbols. Is an ideology being pushed through the imagery? Is the author trying to convince the reader by their choice of words?

Defining CDA as a whole in a single sentence is not really feasible, as it is more of a school of thought than a single method for analysing texts. However, one can argue that it is interested in analysing the hidden structures, agendas, power dynamics, and political interests found in language; the end goal being to find the relationship between language and ideology. In *Critical Discourse Analysis, Critical Discourse Studies and Beyond*, Theresa Catalano and Linda R. Waugh write that it is "a problem-oriented interdisciplinary research movement, school, or field which studies language and other semiotic systems in use and subsumes 'a variety of approaches, each with different theoretical models, research methods and agenda" (Catalano & Waugh, 2020, p. 1). This is more of a general definition however, rather than an all-encompassing one. One can then go on to explain some of the different methods that fit into CDA, something we will do later.

CDA came to prominence after the 1991 Amsterdam symposium, in which scholars met to discuss theories and methods of discourse analysis. The group consisted of notable academics such as Teun van Dijk, Norman Fairclough, and Theo van Leeuwen. Although their body of work was somewhat different from each other, they recognized the similarities, and decided to form the "Original CDA group". They saw how their common "constitutive, problem-oriented, interdisciplinary approach" clearly differentiated them from other types of discourse analysis, and these characteristics have stood as integral to CDA to this day (Catalano & Waugh, 2020, p. 74).

A lexical analysis is one of the most basic ways of doing CDA. It is, as the name suggests, used to analyse the words of a text, meaning it is ineffective when looking at illustrations. The underlying reasoning is that authors express their beliefs through their choice of words, even if their meaning is not expressed directly in the text. By looking at the frequency of certain words, you can deduce the intent of the author. Van Dijk (1993) explains that this implicit information "is part of the mental model of ... a text, but not of the text itself. Thus, implicit meanings are related to underlying beliefs, but are not openly, directly, completely, or precisely asserted" (Machin & Mayr, p. 30, 2012).

Another way of conducting CDA is through overlexicalization where one looks at terms that seem overly explanatory to the point that an ideological connotation might be found within. The examples given in David Machin and Andrea Mayr's *How to do Critical Discourse Analysis: a Multimodal Introduction* are the phrases "Male nurse" and "Female doctor" (Machin & Mayr, p. 37, 2012), where the unnecessary elaboration of the gender into the profession title signify a deviation from what is seen as the conventions of society. The opposite of overlexicalization would be to look for a lack of certain terms that one would expect to be present. Removing the word "alleged" when a newspaper writes of a court report, would drastically subvert the readers' experience of the story, and might denote the paper's opinion of the situation.

All the aforementioned ways of conducting CDA will only play secondary parts to our analysis. We find that these methods are useful when analysing most texts concerning general aspects of society, but when it comes to analysing books, and specifically books about environmentalism, we feel that it is more prudent to utilize the discipline that was specifically designed for said area, that being ecolinguistics.

3.3 Ecolinguistics

Ecolinguistics forms the basis for much of our analysis. Therefore, we deem it necessary to explain what the field is about.

Ecolinguistics is an offshoot of linguistics. The focus of this field is to analyse and critique discourse in our daily lives surrounding the topics of ecology and the environment. This does not only include negative discourse that is considered harmful to the environment, but also positive discourse that may help promote ecological sustainability. We deem it prudent to explore this topic as it will later be relevant when we are analysing the discourse in our selected

books. Arran Stibbe is a professor at the University of Gloucestershire; he has decades of experience in the field of ecolinguistics and is one of the forefront voices on the subject. Stibbe (2014) defines ecolinguistics as the following:

In essence, ecolinguistics consists of questioning the stories that underpin our current unsustainable civilisation, exposing those stories that are clearly not working, that are leading to ecological destruction and social injustice, and finding new stories that work better in the conditions of the world that we face. (p. 117)

In ecolinguistics, the analysis of negative, rather than positive, discourse is most prevalent. In Western culture, much of the discourse is centred around economic growth and the pursuit of a comfortable life. While this can be considered positive, as it can lead to physical benefits and comfort in the short term for some of us, environmental appreciation and, more importantly, protection is mostly ignored. Many ecolinguists (e.g., Goatly, 2001, p. 203; Halliday, 2001, p. 103; Mühlhaüsler, 2003, p. 91) agree that the discourse surrounding ecological collapse and climate breakdown is not conducive to a positive change. The consensus is that modern Western discourse often halts environmental progress, or worse yet; implicitly assists in the destruction of the environment.

There are many texts surrounding the theme of ecology and conservation, such as fictional literary works and texts about climate change. Texts like informational essays and reports on ecological decline are of course highly relevant when it comes to ecolinguistics, where their discourse can be analysed. However, there are other kinds of texts equally as relevant, such as texts surrounding capitalism and the pursuit of economic growth. The discourse in these texts, "precisely through their omission of ecological consideration, can encourage people to behave in ways that are ecologically destructive" (Stibbe, 2014, p. 118). We will explore these kinds of texts later.

As stated, there are many varieties of ecolinguistic studies, but ones where discourse analysis has an ecolinguistic approach have some shared general characteristics. We have assembled a list of these characteristics, based on the work of Stibbe (2014).

1. The focus is on the discourses that have, or might have, an impact on how people treat their greater ecological systems which life depends on, not only how people treat each other.

- 2. The discourses are analysed by pointing out where *clusters of linguistic features* are joined to form particular worldviews, or so-called *cultural codes*. A cultural code is "a compact package of shared values, norms, ethos, and social beliefs... which constructs and reflects the community's 'common sense'" (Gavriely-Nuri, 2012, p. 80). Unlimited economic growth is seen as a noble goal for our capitalist society; this is an example of a cultural code.
- 3. The discourse analysed is derived from the ecolinguist's own ecosophy (Næss, 1996, p. 8), whether it is explicit or implicit. The term ecosophy (ecological philosophy) is a term coined by Næss and is the basis for the ecolinguist's worldview regarding ecology and environmentalism. An ecosophy is informed by science, namely how organisms in nature interact with each other, and ethics; why does the environment need to flourish, and who and what needs to flourish for a sustainable environment?
- 4. As mentioned previously, this ecolinguistic approach attempts to highlight and call out negative discourses; namely discourses that may implicitly or explicitly lead to ecological destruction. Also, it is important to promote positive discourses that can be examples as to how one can protect the environment and preserve life-supporting conditions. Negative discourses are named as such because they work against the ecolinguist's ecosophy, while positive discourses are aligned with the ecosophy in question.
- 5. This ecolinguistic approach has a practical component; raising awareness among people that language and discourse can have a profound effect on how we view our world, and more importantly, our environment. The approach can be used to better shape discourse, making it more ecocentric for a more hopeful future. In order to do this, people must be aware of the negative discourse that is already in place, and resist it. (p. 118-119)

If we put the ecological dimension aside, many of these characteristics are shared with critical discourse analysis. CDA also attempts to inspire change through exposing negative and positive discourse in transnational capitalism, but it is, however, more focused on the social aspect. Rooting out corruption, balancing the scales, and ensuring a freer, more just society is the overall goal of CDA; "If one becomes aware that a particular aspect of common sense is sustaining power inequalities at one's own expense, it ceases to be common sense, and may cease to have the capacity to sustain power inequalities", as Fairclough (2001) eloquently puts

it (p. 71). Ecolinguistics can have much of the same impact as CDA, and can operate quite similarly. Here, the focus is on how assumptions within our capitalist society can be detrimental towards environmental protection, and also on how it can be a step towards positive change.

An area where ecolinguistics differs from CDA, apart from the ecological dimension, is that many of the victims of ecological decline cannot raise their voices in resistance. Whereas people suffering from unequal power relations are often, or ever, not heard, they do have the technical ability to speak up. Victims of ecological decline are often the voiceless; plants, animals, forests, rivers, and even future generations (Stibbe, 2014, p. 119). As van Dijk (1993) puts it, CDA takes the perspective of "those who suffer most from dominance and inequality... Their problems [...] affect the wellbeing of many" (p. 252). For ecolinguists, this includes, as previously stated, those who are not human or those who are not with us yet. Goatly (2001) makes an important point regarding the victims of ecological collapse. The perpetrators of environmental issues, namely humans alive today, can be made to suffer the consequences of their own actions, thereby blurring the lines between oppressors and oppressed. Therefore, causing environmental decline punishes not only our unborn children and the flora and fauna around us, but also ourselves.

CDA and ecolinguistics align in many areas, but the ecological aspect is, as stated, missing from CDA. While CDA can contribute to raise awareness about imbalances of power and help restore parity between people with diverse backgrounds and privileges, it does not automatically lead to a change in our consumer-habits. Stibbe states that "peace in a society that exceeds environmental limits will be short lived" (2014, p. 120). Hiscock (2012) goes further by stating that contamination and abuse of natural resources are key drivers behind war. This is why ecolinguistics is so important; CDA on its own is simply not enough.

Ecolinguistic studies are based on varied ethical frameworks, that all have ecological dimensions in addition to social ones. As previously mentioned, Næss (1996) puts forth the term "ecosophy", which is helpful in describing the frameworks ecolinguists use to analyse discourses:

By an ecosophy I mean a philosophy of ecological harmony. [. . .] [O]penly normative it contains norms, rules, postulates, value priority announcements and hypotheses concerning the state of affairs. [. . .] The details of an ecosophy will show many variations due to significant differences

concerning not only the 'facts' of pollution, resources, population, etc. (sic) but also value priorities. (p. 8)

There are many ecosophies that attempt to combine environmental protection with industrial progress, but these rarely deviate from the current structures (Baker, 2005). They often lean either both ways or no ways at all, environmentally speaking. The Norwegian government may be somewhat scrutinised in this regard. While Norway is one of the world's largest producers of renewable energy per capita in the world (Climate Council, 2022), and is therefore a country to admire in this regard, there is no getting around the fact that Norway's economy has been massively boosted by oil-drilling and gas production (Korsnes et al., 2023). This has led to the Norwegian economy being one of the strongest per capita in the world. There is significant consensus that fossil fuels like oil are detrimental to the environment, and the country is in its current global position largely due to its oil deposits. Norway has many admirers but is clearly not environmentally friendly in all its actions. While the excavation of fossil fuels continues, Norway cannot claim to be an environmental beacon of hope.

There is a plethora of different ecosophies, making up a spectrum where some share more similarities than with others. What follows is a list of some of these, to indicate the variety and diversity of ecosophies.

Cornutopianism, a portmanteau of Cornucopia and Utopia, is the belief that human technology will be so advanced in the future that it can combat climate change and its effects on its own, and that we should steam ahead with industrial progress without hesitation (Lomborg, 2001; Ridley, 2011). This is a rather radical approach and is clearly an optimistic stance. There is no way of knowing that human technology will ever reach this stage, and it does nothing to account for the current situation; it is an ecosophy that kicks the proverbial bucket down the road.

Bookchin (2005) describes another ecosophy called *social ecology*, which is a distinctly different approach from cornutopianism. He explains that the source of ecological decline lies in our social structures, and that we cannot improve our ecological standing while humans have such unequal power relations.

Ecofeminism is an ecosophy that follows many of the same principles as social ecology, but with a clearer focus on the notion that men dominate the environment around them much like they dominate women (Pandey, 2011).

Huan (2010) describes *eco-socialism* as an ecosophy that attempts to combine ecology with socialism. Using socialism to help protect the environment, and vice versa, is an ecosophy deployed by many red-green governments. It is an ecosophy where humans are placed in the centre of the environment; it is a so-called anthropocentric ecosophy.

Deep ecology is a highly interesting ecosophy. This ecosophy is based on the idea that flora and fauna have an inherent worth, and that we should aim to look after our environment because it has intrinsic value (Næss, 1996; Drengson & Inoue, 1996). It also focuses on the fact that human life will be supported implicitly by following these principles of environmental protection. This is similar to how we teach children to respect and learn to love the environment around them and is most certainly the ecosophy most relevant to our thesis. Our suggestions for how to use our selected books in the classroom are all inspired by the ecosophy of deep ecology.

All ecolinguists approach an analysis of environmental discourse with their own ecosophy. Stibbe (2014) puts it as such: "Discourses can fall along a spectrum in terms of their 'fit' with [one's] ecosophy" (p. 121). As an ecolinguist, one is already predisposed to favour positive discourse about the environment and resist potentially destructive discourse. Halliday (2001) exemplifies this by critiquing the discourse surrounding economic growth (p. 192). The word 'grow' is a word associated with progress and positivity, and it is often used in our capitalist society when it comes to industrial and economic advancements. The use of such positive terms around these topics can lead to a negligent, harmful attitude towards our environment. Ecolinguists, like Halliday and Stibbe, oust this discourse and resist it, otherwise it can be assumed as common sense. The animal product industry is also a topic where discourse surrounding it is harmful; Gargan (2007) critiques the industry for its promotion of toxic and high energy-consuming products that lead to significant damage to ourselves, the animals, and the environment. Animals, in the discourse of the industry, are portrayed as resources and machines rather than living beings, thereby justifying ecologically damaging behaviour towards them (Stibbe, 2014, p. 122).

When ecolinguists are able to analyse discourses and adjudge them to be negative and harmful for the environment, there is the question of what role ecolinguistics can play in resisting these discourses and, in turn, influence a change for the better. Fairclough (1992) describes a helpful approach he calls *critical language awareness*, hereafter referred to as CLA. This involves making people aware of the damage that certain discourse can lead to if left unchecked, and

also attempts to provide aides to help resist this discourse. The aides are mostly abstract, and the focus is primarily on raising the recipient's critical awareness of what they perceive in their daily lives. Being critical of certain adverts is an example; in our capitalist society, every advert's purpose is to aid in brand-building and, ultimately, make more money. Asking oneself if one really needs the product being advertised, or being critical of what downsides there potentially are; this is what CLA attempts to accomplish (Stibbe, 2014, p. 122).

Stibbe (2014, p. 122-123) suggests that CLA is most effective when deployed among the people who are actually responsible for the negative discourse in question. An example is attempting to raise awareness of industrial and economic growth discourse among those responsible for them, namely politicians and governments. People generally do not want to actively contribute to something negative. When confronted with this fact, the hope is, and it is rather an optimistic view, that they would rethink their discourse in order to be more environmentally supportive. It has happened, an instance where some within an industry have called upon themselves to change for the better after being confronted about their discourse. The following is an excerpt from the poultry industry journal *Poultry Science*:

Scholars (Linzey, 2006; Stibbe, 2003) have suggested that industry discourse characterizes animals in ways that objectify them [...] Although an analysis of discourse may seem odd and irrelevant [...] this type of examination is illuminating in some potentially beneficial ways [...] It may be necessary to reconsider several aspects of animal production relative to ideology, discourse, and practice. Transparency of contemporary animal production practices and a real ethic of care and respect for animals must be embodied not just in our practices but also in the internal and external discourse of animal agriculture. (Croney & Reynnells, 2008, p. 390)

What is important to note here, is that the analysis comes from within the industry itself. In this excerpt, the industry calls upon themselves to change not only their discourse, but also the industry's own practices. This shows that CLA can be an effective approach within ecolinguistics.

Ecolinguistics not only has a focus on negative discourses. It also focuses on discourses that may appear constructive at first, but upon closer inspection do not further an environmental agenda. These are called ambivalent discourses (Stibbe, 2014, p. 123), and are named 'Greenspeak' by Harré et al. (1999). Examples of ambivalent discourse can be found in many

children's books about the environment. The focus in these books is too often simply on minor changes like recycling and water consumption, which Echterling (2016) argues is unhelpful in the long term (p. 286). Stibbe (2014) emphasises Echterling's point, stating that none of these discourses "require a fundamental reconsideration of how much is consumed overall and who consumes it" (p. 123). Following these discourses uncritically can lead to a fortification of an ecosophy that will not deviate from the current structures in our society (Baker, 2005).

So far in this section, there has been a lot of focus on how ecolinguistics can assist in critiquing and resisting negative discourse in reference to the environment. However, in order to make a practical difference, positive discourse must also be examined and analysed. This would more easily carve a path forward and away from negative discourse (Martin & Rose, 2003) since it is easier to tell positive discourse apart from negative if one is explicitly shown the difference. Some examples of positive discourse are found in Japanese haiku, something Stibbe (2012) analyses, where one is encouraged to respect and love nature for its inherent value. Linguistic features that call for respect, protection and sustainability are considered positive discourse. When analysing these discourses, it is important to stay critical. While an ecolinguist might agree with and even praise the discourse, likely because it affected or laid the groundwork for the analyst's own ecosophy, it may contradict itself in places or produce unintended side effects (Stibbe, 2014, p. 124). Therefore, a critical mindset is vital here, as well as with negative discourse.

This form of analysis is aptly named *positive discourse analysis*, a descriptor coined by Martin & Rose (2003). It is essentially a version of *critical discourse analysis*, where the name is the most significant change. Where it differs, however, is in its emphasis on positive discourse. Ecolinguistics, in its history, has overwhelmingly focused on negative discourse (Stibbe, 2014, p. 124), whereas positive discourse analysis aims to shift the focus in order to create a pathway forward. The critical viewpoint of the analyst is prevalent in both negative and positive discourse analysis; it is only in the practical sense it differs. Summed up, positive discourse is promoted and encouraged, while negative discourse is challenged and resisted. Stibbe (2014) stresses that it is key to promote or resist the discourses, or rather the clusters of linguistic features that portray a certain view, instead of the texts themselves (p. 124). The authors of the texts must be made aware of their own discourse, be it positive or negative, so that we can look forward to a future where the environment is not cast aside or disregarded in our daily discourse.

In our daily lives, we are constantly surrounded by consumer culture. We are exposed to so many advertisements that we often do not even notice it, and most of us are trying to stay up to date on new clothes and technological gadgets as well. Most of the discourse surrounding us promotes this culture, and Soper (2011) argues that there has not been enough effort to resist this notion of, what she calls, the 'good life'. This is where ecolinguistics can make a difference. As stated throughout this section, ecolinguistics can expose and resist the negative and destructive discourse that will inevitably lead to ecological collapse if left unchecked (Stibbe, 2014, p. 125). It can also forge a new path forward, by promoting positive discourse that will stop ecological decline.

As evidenced by it being the most substantial share of our methodology section, ecolinguistics will heavily influence our analysis. We will be looking for the phrases, words, images, and other semiotic choices in order to get a good idea of the authors' ecosophies. We will see if there are multiple examples of types of words, with similar connotations to certain ecosophies, and then relate those to the overall discourse that the book seems to propagate. We are also going to analyse whether the discourse is positive or negative, if this is an effective choice, and how it would differ if it was the other way around. Another benefit of using ecolinguistics is the fact that it often has a focus on what Charles J. Stewart calls "other directed social movements" (Stewart, 1999, p. 92), where the movement is propagated by people who fight for the rights of others rather than for their own. Stibbe (2014) explains that those who are hurt by ecological destruction, are most often those who are not conscious of the injustice done to them, or cannot articulate their own struggle, i.e., flora, fauna, the land itself, and future generations of humans (Stibbe, 2014, p. 119). CDA can take the perspective of those that suffer and give a voice to the voiceless. This is not done in order to raise consciousness among the oppressed, but rather for those that live in ecologically oppressive societies and might have the power to change it. This is what many books about environmentalism often do. They use the oppressed as a point of view character, giving them voices, and allowing the reader to sympathise with them their struggles as sentient beings, and we are going to point to these instances in our analysis.

However, ecolinguistics is limited in the sense that it only applies to written text. Discourse comes in different modes, and our analysis will extend to the imagery found in picture books as well as the written text. That is why we have chosen to use *multimodal critical discourse*

analysis to a degree when an opportunity presents itself, the goal being to achieve a more holistic analysis of the chosen works.

3.4 Multimodal Critical Discourse Analysis

The word multimodal means that many modes are used in the same expression. Examples of modes could be music, images, or language. They are different ways of communicating meaning, either audibly, visual, or sensory. Monomodality would be a book without pictures, or a piece of music without lyrics. Monomodal expressions have been very dominating in western culture (Kress & van Leeuwen, 2001, p. 1); paintings were mostly oil on canvas, academic papers were without colour or illustrations, and orchestra musicians dressed as uniformly as possible. In more recent years, this preference for monomodality is no longer as prevalent. Comic books, movies, music videos, and social media, quintessential facets of modernity, all use many modes when communicating. Professors Gunther Kress and Theo van Leeuwen created an approach of how to analyse meaning when it is created by two or more modes, calling it multimodal analysis.

Multimodal critical discourse analysis (MCDA) is an expanded concept from what Kress and van Leeuwen created, and, as the name implies, is related to critical discourse analysis. It is interested in the meaning created during the interplay between multiple modes, such as text and image, and how it reveals choices made by the author (Machin & Mayr, 2012, p. 9). When using MCDA, you often do the analysis of one of your modes, and compare it to what you found in the accompanying mode. If you, for example, have a text and an accompanying image, you would analyse the text, and then analyse the image, looking for underlying meanings, ideologies, or implied rhetoric, then compare the two, with the goal being to get a clearer understanding of what the author was working towards. You can also see if a mode's message can change based on the implications of the second; the image changes the meaning of the text by its inclusion. Two modes might contain semiotic choices by authors in order to carry out certain ends (Machin & Mayr, 2012, p. 9).

Although multimodal critical discourse analysis has marked utility due to its versatility, being useful in analysing a wide variety of discourse, modes, and media, we will only be using it for the analysis of two modes, being text and image. As most of what we have already written about CDA is very much still applicable to MCDA, we will only explain how its divergences are pertinent to our analysis. For one, CDA is more focused on language, leaving little room

for analysis of illustrations. This is where MCDA is useful to us. When we investigate the picture books, we will be looking at where the underlying, or implicit messages can be extracted, and show how they correlate or conflict with what we have seen in the text. This will give us an idea of whether the author is skewing the message through the use of collaborating illustrations, or if they reinforce what is already apparent from the text. When looking at images we will also do what is called an *iconological analysis*. Iconological or iconographical analysis is one of the simplest ways of analysing images in MCDA. As explained in Machin and Mayr's *How to do Critical Discourse Analysis: A Multimodal Introduction*, it is to "explore the way that individual elements in images, such as objects and settings, are able to signify discourses in ways that might not be obvious at an initial viewing. We ask which visual features and elements are foregrounded and which are backgrounded or excluded" (Machin & Mayr, 2012, p. 31).

Using these methods, alongside critical discourse analysis, and looking at ecolinguistic features, we hope to be able to analyse the chosen books thoroughly. Finding the discourse within these books requires a thorough inspection of all semiotic features presented by the author or illustrator.

4. Analysis of books

For this project, we have selected five books that we will be examining closely. As mentioned, one of our research questions was to see how nature and its relationship with humanity is portrayed in the books by Eric Carle's *The Very Hungry Caterpillar*, and *The Tiny Seed*; Jen Cullerton Johnson's *Seeds of Change: Planting a Path to Peace*; Colin Dann's *The Animals of Farthing Wood*; and Piers Torday's *The Last Wild*. In this section, we will be exploring these books and analysing them in accordance with this research question. These books differ in age target groups, authors, content, and messages. They are all, however, part of the genre of environmental children's literature. As we have previously discussed, the discourse present in ECL varies in degrees of positivity and negativity in relation to the environment. The discourse in the following books will naturally be analysed critically, in addition to other relevant material. Some of the books will be analysed more exhaustively than others, simply due to the fact that the books have such varying length. The section on *The Last Wild*, for example, will be more comprehensive than the section on *The Very Hungry Caterpillar*.

4.1 The Very Hungry Caterpillar

The Very Hungry Caterpillar, a picture book published in 1969, was written and illustrated by Eric Carle. In the book, we follow a caterpillar throughout its life, from its egg hatching to its metamorphosis into a butterfly. As the title suggests, the caterpillar has a ferocious appetite, and we see it going through a variety of fruits and other foodstuffs. After indulging its appetite over the course of a week, the caterpillar builds a cocoon for itself. After two weeks it emerges as a beautiful butterfly, and that is where the story ends.

The story is quite short; it consists of thirty-two pages and only 224 words. It is targeted towards young children, especially those aged from three to six. Part of the book's appeal is its saturated and vibrant colours; it has been shown that children are more likely to have a strong emotional connection to bright colours, compared to darker tones (Boyatzis & Varghese, 1994, p. 79). Also, the book's simple vocabulary makes it easy to follow along for children.

Given the book's target demographic, along with its vibrant imagery and simplistic language, what can we say is being broadcast to its readers? The book's themes and, more importantly, its discourse will be analysed to see to what degree *The Very Hungry Caterpillar* is helpful in portraying environmentalism.

The discussion and analysis of discourse in texts can easily be construed as simply examining words in written texts. The terms *discourse* and *texts* are not so simple; they are multidimensional terms. Kress & van Leeuwen (2001) explore the terms in their book *Multimodal Discourse* and argue that they are multimodal; meaning that they are portrayed in many modes. These modes include not just written language, but also imagery, audio, and body language. Further, *discourse* can be defined as "what message is being sent", while *texts* can be defined as "how is the message being sent". *The Very Hungry Caterpillar* is a multimodal text, in that it contains both written language and imagery. In this book, what is the message being sent, and how is it being sent?

As previously mentioned, the book is packed with images of bright colours, which is very endearing to children (Boyatzis & Varghese, 1994, p. 79). The leaves, the sun, the fruits, and other food all have a distinct vibrancy to them, and figuratively pops out at the reader. On the last two pages, the caterpillar has turned into a beautiful butterfly, and is made up of heavily saturated tones of blue, red, green, yellow, and purple. It is visually appealing, and the book's imagery is the star of the show. The book's framing allows the images to take up most of the space; the text describes what happens, but is more of a bystander to the sublimity of the images. The text is small and informative, while the images are big, and descriptive in their own rights.

Following on, what does the imagery of the book say about its discourse? This can be challenging to determine, as images are far more open to interpretation than, say, written text would be. It is in our view, however, that *The Very Hungry Caterpillar* projects a discourse rooted in deep ecology (Drengson & Inoue, 1996). The rich colours, along with its positive portrayal of various flora and fauna, ensure that nature in itself becomes the focal point. Carle portrays nature in his book not as a resource for humans, but rather something to be enjoyed and be educated by in its own right. Simply observing nature, and its fascinating creatures, creations, and processes, is enough. It is clear to us that the imagery in the book can have a profound effect in fostering a love and appreciation of nature in its readers.

Continuing from the book's imagery, what role does the written language play in this book? The language has an educational component to it. It explains, in a roundabout way, the life cycle of one of nature's creatures, a caterpillar. We can safely say that we would not have learned that butterflies come from caterpillars if not for this book, at least not as early as we did. The language itself used is, as mentioned, complimentary to the book's imagery; it does

not offer much in its own right. If one were to consume this book without reading any of the words, one would still understand the whole story. The written language is therefore a sideshow; unremarkable, but helpful when reading aloud for children. However unremarkable, its discourse is still much the same as the imagery's, in that it fosters *deep ecology* (Drengson & Inoue, 1996) in its readers.

We have previously discussed how most ECL is not informative enough in describing what can be done to help the environment. This book, while environmental, has a narrower lens, and should not be considered in the same vein as some of the other books we will analyse later. This, however, is not to say that *The Very Hungry Caterpillar* is immune to criticism. A cynical view of the book is that the titular caterpillar's insatiable appetite stems from an "American desire to accumulate", and that "the worm is very greedy" (Muenchrath, 2022, p. 190). Muenchrath, in a sense, argues then that *The Very Hungry Caterpillar* can be seen as a metaphor for consumerism. While we can see the parallels being drawn from book to real life, we take issue with the argument. In the book, the caterpillar consumes more than a normal caterpillar might. However, the scale of the caterpillar's consumption only amounts to a few fruits and some processed food. Its consumption is not an unsustainable behaviour; the ecosystem will not collapse from his actions. Humans have a far greater capacity to act unsustainably; we therefore argue the comparison to consumerism is unfair.

As stated previously, the general discourse in western society can be conducive to ecological decline (Goatly, 2001, p. 203; Halliday, 2001, p. 103; Mühlhaüsler, 2003, p. 91), but *The Very Hungry Caterpillar* does not contribute to this negative discourse, in our opinion. However, while not explicitly negative, can it be argued that the discourse is ambivalent? Ambivalent discourse is, as previously mentioned, discourse that may at first sight appear environmentally constructive, but upon further examination does not contribute to a positive change in environmental thinking (Stibbe, 2014, p. 123). *The Very Hungry Caterpillar* has no mention of environmental issues, nor does it offer any potential solutions to the issues. It does not turn to tired tropes of recycling or consuming less water, nor does it appeal to its readers to write to their politicians or join environmental youth clubs. However, we argue that this is not the objective of the book. It is not the sort of book to explicitly bring to light environmental issues; its purpose is to introduce its readers to the wonders of nature. Therefore, judging it based on other ECL we have discussed seems unhelpful.

Overall, we argue that the discourse portrayed in this book is positive. It is not a book meant to stir up environmental issues, nor does it call upon its readers to take action against ecological collapse. What it does, in a very simple manner, is draw attention to nature, and shows how beautiful it can be in its own right. It leaves its readers awestruck, by way of vibrant colours and nature's creations. It showcases deep ecology (Drengson & Inoue, 1996), and implicitly inspires its readers to want to take care of nature, and learn more about the way the environment works. This book is therefore environmentally positive, and we argue it is a good introduction to environmentalism for children.

4.2 The Tiny Seed

Although not as well known as *The Very Hungry Caterpillar*, *The Tiny Seed* is another of Eric Carle's works, utilising the same vibrant, watercolour art style, and targeting children as its demographic, albeit slightly older children. It contains more text, and slightly more complex language. The story is also not as short and concise, but still has a very nice message that children can take from it. Similarly to most of Carle's other stories, *The Tiny Seed* works mainly to teach young children about the environment, its mechanics, and wonders in a simplified manner, in order for the audience to grasp the essentials. It is the art style, in addition to their utility in education, that has made Eric Carle's books so popular.

Similarly to the analysis of *The Very Hungry Caterpillar*, we will have a look at the discourse and thematic content of the book, in light of how it might convey an environmental message. We will be looking at the narrative, the character focus, the linguistic features, and the illustrations when analysing in order for the discourse to manifest. We are going to see if there is a push for environmental protection, or if the book's ecosophy leans away from human action, the difference being whether the discourse is positive or negative.

The narrative of the story is the life cycle of a small seed that is ejected from a flower, together with a cluster of other seeds, all of which are larger than it, flying around on the breeze. Throughout the first three quarters of the pages, the other seeds are stopped from entering their Aristotelian final cause of a flower (Aristotle, ca. 350 B.C.E./1991, p. 32). Some hit the ground on patches of land that are unsuitable for a seed to sprout roots, like the desert, and on a mountain peak, while others are burnt up in the sun, eaten by animals, or plucked before they can mature enough to send out their own seeds. The main character, the little seed, although struggling to keep up with the others, evades all of these perils by landing in a fertile plot, being

too small to be spotted, and by growing slower than the plants that get plucked. In the end, it grows to be the tallest flower in the world, dwarfing humans and houses, and it lets the gale force wind carry its small seeds on their own journey to continue the circle of life.

If the goal of *The Very Hungry Caterpillar* book was to teach about the metamorphosis of caterpillars into butterflies in a manner simple enough for a toddler to comprehend, this book does the same about how flowers come to be. On the surface, the story is only a fictitious retelling of the life cycle of a flower. These common concepts that we adults are so familiar with, need to be taught to the children who hear of it for the first time. They do not know the connection between plants and seeds, and this book takes them on a journey to experience it second hand. Seeing this happen in the book turns a process that takes place over a long-time span, into a digestible event on a few pages. The reader is left with the knowledge of how seeds come from plants, go on a great migration to fertile soil, and are again turned into the plant. They also get to see the perils of such a journey, and also what is needed for a plant to fulfil its end.

The illustrated pages are constructed in a manner that encourages the young readers to explore and investigate the narrative within the pictures. They want to find the tiny seed, which is seldomly in the foreground of the page. As all the other seeds keep their size on the pages, and are all proportionally equal, the tiny seed is always seen as smaller, making it distinct from the others. This is significant as the tiny seed is always identifiable, and therefore something the reader has to look for. On the first fourteen pages, the tiny seed can be pointed out among the others if you look for it. Then, when the seeds are starting to sprout, it becomes a game to guess which one is the tiny seed. This is a way of showing the continuation of seed to plant. You know that a certain seed becomes a certain plant. This may seem redundant, but it is a part of the knowledge that the children have to take away from the book. The composition of the illustrations rewards good reading comprehension, as the children are able to read the story and see it unfold on the page.

The distinct art style found in all of Eric Carle's picture books shows his understanding of the importance of connecting to the young readers through colours, and shapes. We know that vibrant, saturated colours are much better at drawing young children in, compared to darker colours (Boyatzis & Varghese, 1994, p. 79). Add that to the creative, yet simple shapes that make up the landscapes, objects, creatures, and people in his works, pieces that look like things

that might be found in a child's drawings, and you have a book that is perfectly suited to engage and educate a young child.

One theme displayed in the story can be about the fragility of the environment. All of the other seeds that were sent out alongside the tiny seed do not get to reach the last stage of their life. Half of the seeds do not make it onto the right kind of soil, and their journey is thwarted from the get-go. The others were eaten, outcompeted by plants in the vicinity, or plucked by humans. The book shows the young reader that the right conditions and chain of events need to be in place to facilitate the growth of a flower, and that a small difference in placement, size, or growth speed will change the outcome for the individual's life. Teaching young children about this fragility of the nature around them may foster a wish to protect its more delicate parts. When they see the child picking the flower to give it to a friend, it can make them think about the effect they have on the life around them.

The humans in this book show how the author sees our species: lacking in respect for nature. The first glint of a human we are shown, thoughtlessly runs over the field, and crushes one of the flowers from ever growing its first petals (p. 17). The second human uses nature selfishly and frivolously (p. 20). The previous obstacles facing the seeds act out of self-preservation, or are not accountable for the happenings that cause certain seeds' demise. It is only the humans who needlessly oppose the seeds' quest. Plucking the flower only serves the humans as a means for an aesthetic end. This might be the book showing how human actions towards nature are usually destructive, and the actions are usually perpetrated without a thought for the consequences. Lastly, when the tiny seed has finally grown, and is now a magnificent flower, too big to be heedlessly stomped on, or plucked by a single human; it becomes a spectacle for humans' ophthalmological aesthetic consumption (p. 24). The flower does not get to exist outside of human experience, or hold any intrinsic value as a part of nature, for it has now become an attraction, and people come from near and far to see it. Although this is not destructive towards the flower, and it is allowed to partake in its ecosystem, the book places the flower in the eyes of the human characters of the book, making it impossible to judge its value outside this environment.

The discourse of the book emerges when looking at how humans are portrayed linguistically compared to nature. Whenever a seed lands at a place it cannot grow, and subsequently dies, the event is written neutrally. It happens, and the narrative continues without wavering or remarking it with a sympathetic word. The other seeds fly onwards. "One seed falls in the water

and drowns. The others sail on with the wind" (p. 8). This is the case for when a seed is eaten by a bird (p. 11) and a mouse as well (p. 13). On pages when nature is the cause for one of the seeds' demise, the language that is used only shows concern for whether the tiny seed will keep up with the survivors. The deaths of the seeds through natural causes do not carry any moral connotations within the language. On the two pages where a human is the culprit of a seed's passing, the language carries more negative connotations. The first casualty is when a child does not look where they are running, and steps on a growing plant. The book remarks: "Oh! He breaks one!" (p 17), the exclamation points signifying that the text is shocked by this, an emotion that was not present when nature was the perpetrator. This action is not something within nature, because it was something done by a human. On the next page, a seed that had grown into a flower is picked up by another human. This time as well, the language carries negative connotations in relation to the killing. "But what is happening? First there are footsteps. Then, a shadow looms over them. Then a hand reaches down and breaks off the flower" (p. 20), the text shows disbelief in the first question. The wording of "... a shadow looms..." carries the negative connotation of a threat. The book is implicitly saying that when a human causes the death of a plant it is shocking, as it is outside of what is natural, as opposed to when it happens because of the actions of animals or other plants, or when the seed dies by virtue of its location. This holds a parallel meaning to how humans have caused such destruction towards the environment in the last few hundred years. It is not a tragedy when nature itself causes destruction; you cannot hold a volcano or meteorite responsible for its actions, but when human actions lead to environmental degradation, it is a moral wrongdoing. As *The Tiny Seed* shares both an author, art style, purpose, and demographic, it makes sense to analyse it in a similar manner to *The Very Hungry Caterpillar*. Most picture books benefit from a multimodal discourse analysis, as the interplay between the images and text is a vital part of

analyse it in a similar manner to *The Very Hungry Caterpillar*. Most picture books benefit from a multimodal discourse analysis, as the interplay between the images and text is a vital part of any interpretation. In *The Tiny Seed*, the illustrations and text mostly semiotically reinforce each other, as they both carry the same message, only differing in their modes (Kress & van Leeuwen, 2001, p. 20). On the first page the text describes a scene, telling us the season, weather, and characters, all of which can be seen on the page; the only addition being a point of conflict: the question of the tiny seed keeping up with the others. Doing an iconological analysis (Machin & Mayr, 2012, p. 31), we can extract several bits of information about the discourse being presented in the illustrations. We see the illustrations reinforce the discourse in text in the instances where humans interact with the flora. The first two times, the plants are mutilated; unable to continue their journey to send off their offspring. The two plants are placed

in the same place on their respective pages, both times being maimed by appendages coming from off screen. The recurrence of this motif underscores the author's opinion of how humans lack of care for plant life.

Another choice that does not seem to be coincidental is the fact that one of the seeds is incinerated in the sun, despite it being an impossibility in the real world. This book was written in 2005, years after global warming became an established concept that citizens were aware could be a dangerous aspect of life in the future. This could be Eric Carle alluding to another of humans' thoughtless actions leading to the destruction of the characters we have been following in the story, making it the first human induced casualty of the book. If this choice was intentional, then the book is clearly taking a standpoint against human induced climate change, which is not a surprising opinion for an author who writes about nature in all his books to hold.

It should be noted that not all the adversity facing the seeds on their journey is destructive towards the environment as a whole. The seeds that are eaten go on to nourish other agents within the ecosystems they enter. Seeds make up a large part of a bird's diet, and mice cannot survive the winter without scavenging for food beneath the snow. The failure on the majority of the tiny seed's brethren's side, becomes a necessary link within an ecosystem, aiding in its sustainability. This weeding out of seeds that are unfit to propagate its species is also important for its evolution. If only the tiny seed is able to reach maturity, it signifies that its genetic makeup is better suited for its environment, and will be better able to send its DNA into the next generations of flowers, thus evolving into a stronger species. At the last page, the new seeds are described as tiny as well, suggesting that its genes have indeed been passed, and if this trend continues, all the seeds of that species will have to be small ones in order to survive. This is a clear example of evolution taking place.

Both within the imagery, as well as the text, the titular tiny seed is shown as smaller than the others, and the book asks the rhetorical question: "Will it be able to keep up?" (p. 1). The book shows time and time again that it is, and that it sometimes has an advantage because of its size. The tiny seed shows us that even if we are small compared to others, we have the potential for growth within us. It does not matter if it takes longer than for others, as that can be an advantage in some cases. That potential for growth can be in the form of our exploits as well, where small actions can have a large impact. Taking a small step, by planting a seed for instance, can be

part of a larger movement to save the environment. The tiny seed struggles to keep up with the other seeds, and it is rewarded at the end, when it stands as the pinnacle of all flowers.

Although *The Tiny Seed* seems like a simple story, telling of the journey of a small seed towards its destination as a flower, its discourse shows us how the author may be critical to certain aspects of humans' relationship with nature. While it is seen as something neutral when it is nature who is the cause of a seed's demise, when a human does it, it is portrayed as shocking, or a moral wrongdoing. This is seen within the linguistic choices that differ in the two different cases, and is supported by analysis of the illustrations. The humans are portrayed as destructive either as a consequence of their neglect or because of frivolous fancies, such as aesthetic inclinations when one of the flowers is plucked as a gift. They halt the efforts of the plants in the story without a thought for the consequences, just as the human species acts towards the environment outside the book. In the next book, we see what happens when humans deliberately destroy plant life in order to further industrial agendas.

4.3 Seeds of Change: Planting a Path to Peace

Seeds of Change: Planting a Path to Peace was published in 2010, authored by Jen Cullerton Johnson and illustrated by Sonia Lynn Sadler. It is a picture book, written for a target audience of young children. The book consists of forty pages; all the pages are illustrated, while around half have additional written text. For simplicity's sake, the book will hereafter be referred to by its shortened title: Seeds of Change.

Most picture books written for children are fictitious; however, *Seeds of Change* is based on the real-life story of Wangari Maathai. Wangari Maathai was a Kenyan environmentalist who started the Green Belt Movement, after the Kenyan government's industrial deforestation made reforestation necessary for ecological sustainability. *Seeds of Change* tells this story for a juvenile audience, and focuses on Wangari Maathai's personal life and inspiring journey. In this section, we will be analysing the book's themes and discourse, and evaluating its position as a work of ECL.

Jen Cullerton Johnson is responsible for the written language in the book, of which we will be examining the discourse. Nature is described pleasantly throughout the book, with much emphasis on the beauty and joy humans find in it. The fruit is "delicious" (p. 4), the figs of the mugumo tree are "sweet" (p. 15) and the water is "clear and sweet" (p. 8). Nature is generally depicted as something that humans can take advantage of; the ecosophy the book portrays can

be seen more as eco-socialism (Huan, 2010) than deep ecology (Næss, 1996; Drengson & Inoue, 1996). Throughout the book, Wangari employs nature, and how to protect it, as a vessel through which social changes can occur, which is inherently eco-socialism. However, there are occasions in *Seeds of Change* when nature is depicted as something of inherent worth, which ties in closer to deep ecology: "birds chirped in their nests" (p. 4), "the branches bounced with jumping monkeys" (p. 4) and "wild figs grew heavy in mugumo branches" (p. 27). Here, nature is simply observed for what it is, not how humans are able to take advantage of it. We therefore argue that the ecosophies portrayed in the book's written language is a mixture of eco-socialism and deep ecology.

There are also traits of ecofeminism to be found in the written language of *Seeds of Change*. Ecofeminism is, as previously discussed, an ecosophy that entails how men dominate the environment similarly to how they dominate women (Pandey, 2011). When Wangari raises the issue of planting trees to help the environment, Johnson describes how "some men laughed and sneered [and thought she had] too many opinions and too much education for a woman" (p. 23). Other than this quote, Johnson focuses more subtly on critiquing gender disparity. She describes how Wangari "knew few Kikuyu girls who could read" (p. 8), and that "not many native women become scientists" (p. 17). Along with this, Johnson attempts to strike a more empowering tone to her fellow women; through Wangari, she states that "a woman could do anything she wanted to [and Wangari] found her strength as a woman scientist" (p. 17). As Johnson seeks to call attention to the important issues of equality and gender disparity, there is clear hopefulness and positivity in her words. She addresses the issues in such a way that the book's young readers can be made aware of them and not overwhelmed by them. Feminism is a cause worth fighting for, and as "Wangari led the way for other women and girls" (p. 20), children can be similarly inspired.

Throughout the book, Johnson likens humans to nature through the use of similes and metaphors. When Wangari's brother tells her about school, Wangari "listened as still as a tree, but her mind swirled with curiosity like the currents in the stream" (p. 8). After Wangari finishes school, "her mind was like a seed rooted in rich soil, ready to grow" (p. 14), and her idea to start planting trees is said to have been "as small as a seed but as tall as a tree that reaches for the sky" (p. 23). The most explicit parallel drawn by Johnson is when Wangari discovers that "animals and plants [...] were like human beings in many ways. They needed air, water, and nourishment too" (p. 11). The fact that humans are depicted as part of, and at one

with, nature is an uncommon stance to take in general Western discourse (Stibbe, 2004, p. 252). However, we argue that it is vital that Johnson assumes this position. As Goatly (2001) argues, us humans will be made to suffer the consequences of our own actions, if we do not address the climate breakdown we are causing. We are both the perpetrators and the victims of ecological collapse. When Johnson likens humans to nature like she does in *Seeds of Change*, it reinforces the fact that when we are harming the flora and fauna around us, we are also harming ourselves. Also, by writing like this, Johnson implicitly tells the reader that when we take care of the nature that surrounds us, we take care of ourselves.

Following on from this point, *Seeds of Change* depicts a type of environmentalism that is not often seen in ECL; Echterling (2016) calls this *environmentalism beyond the home* (p. 294). This type of environmentalism is something we have elected to call social environmentalism. Examples of social environmentalism being depicted in *Seeds of Change* can be found throughout the book; Wangari travels around the world to spread her message and story to ambassadors, presidents, and teachers. "With everyone she met, she shared the seeds of change" (p. 36). This goes beyond the oft-peddled message sent to children in most ECL, where one is encouraged to simply recycle and reduce one's energy consumption. In the book, Johnson also echoes the importance of teamwork in the endeavour of improving the environment: "Let's work together! [...] We must plant trees" (p. 23). This combination of working together and calling on people in power to enact changes is a positive message to send to children, and promotes social environmentalism.

Promoting social environmentalism is difficult to accomplish without doling out fair criticism of the current power structures in our society, and *Seeds of Change* addresses these issues. The implications of capitalism are on display when business people "greedy for more land", ask each other why they should "give up [their] land and profits for trees" (p. 32). They are angry with Wangari, and pay "corrupt police officers to arrest Wangari" (p. 32). It is clear to see who the villains in this story are, given the actions of the business people to stop a woman who wants to plant trees and promote teamwork in saving the environment. Johnson makes it clear in the book that profits is the only motivation for the business people, and anyone getting in the way of this will subsequently be dealt with. Johnson's specific discourse in this section is also important to take note of; when quoting the business people, they use the term "profits" (p. 32). In their capitalist mind, it is a term associated with economic growth, and is something to always aspire to for them. Ecolinguists (Stibbe, 2014; Halliday, 2001) argue that this type of

capitalist discourse not only diminishes the impact of industry on the environment, but exacerbates climate breakdown. Johnson critiques the discourse of the business people, and responds with some of her own: "corrupt police officers" (p. 32). Here, she directly links money to a word of negative connotations, namely "corrupt". We therefore argue that Johnson is criticising the practice of capitalism as a whole, in order to promote social environmentalism.

Sonia Lynn Sadler is the illustrator of *Seeds of Change*, and is thereby responsible for the imagery in the book. Here, we will be examining the discourse of the imagery. As we read through the book, what is immediately clear to us is how the illustrations figuratively pop out of the pages. They are filled with lush and vibrant colours with rich tones of green being most prominent throughout, giving us the impression that nature is indeed in focus. The illustrations are outlined in white, instead of the more common black, which has an added effect of making the images appear brighter. As previously mentioned in the analysis of *The Very Hungry Caterpillar*, and *The Tiny Seed*, children are more perceptive to bright colours than darker tones (Boyatzis & Varghese, 1994, p. 79), and *Seeds of Change* promptly follows suit in this regard.

Like most picture books, *Seeds of Change* tells its story through multiple modes, namely visual imagery and written text. This use of multimodality allows the story to be told in more ways than one, and it is often the case that the imagery complements the written text (Kress & van Leeuwen, 2001, p. 20). However, in the case of this book, we argue that it is in fact the written text that compliments the imagery instead. The illustrations envelop the entirety of the pages, and on some pages it is difficult to notice the written text at first glance. The written text often clarifies and expands on what is being depicted in the images, such as when we see Wangari hugging a tree (p. 5-6). One might assume that Wangari simply loves trees, and while she does, the text clarifies that she also "wrapped her arms around the trunk as if hugging her great-grandmother's spirit" (p. 5). As readers, we implicitly appreciate the different roles the modes play, and this combined effort by the modes enhances our experience of the book.

The ecosophy of eco-socialism is, as in the written text, also present in the illustrations. Throughout the book, Wangari encourages teamwork in order to improve the environment and the world around them. We can see the joy in people's faces when Wangari motivates the people of Kenya to start planting trees, and the lush green of the trees combined with the golden sunlight sends a message of positivity (p. 24-26). The happiness we see portrayed by the common people is contrasted with the angry faces of the "greedy" business people (p. 31). The critique of capitalism and corporate greed is not very subtle; Sadler makes it clear that she and

Johnson agree on how these profit-seeking mindsets can be detrimental to the environment. Sadler then, through her illustrations, demonstrates the goodness of working together to help the environment, and rejects capitalism. People banding together to work towards a common goal for the greater good is a tenet of socialism, and maintaining the environment is, of course, an important aspect of ecology. *Seeds of Change* thus often depicts an ecosophy of ecosocialism (Huan, 2010) through its illustrations.

To say that the book depicts pure eco-socialism, however, would be somewhat reductive. While there are many traits present, as previously discussed, there are some deviations as well. In *Seeds of Change*, nature is often depicted as something that humans can enjoy. We see children and mothers eating "maize, bananas and sweet potatoes until they could eat no more" (p. 30). This anthropocentric view is indeed typical of eco-socialism (Huan, 2010), whereby humans are placed outside of the environment. The book counteracts this stance on many occasions, however, such as when Wangari notes that "animals and plants [...] were like human beings in many ways" (p. 11). The deviations are naturally more noticeable in the written text, but the blending of humanity and nature spring forth in the illustrations as well. The clothes the villagers wear are reminiscent of tree branches and sun rays, while many of the women depicted wear dresses with floral patterns. The animals themselves are depicted with smiles on their faces (p. 27), bringing bliss and happiness to mind. This is a subtle way of promoting deep ecology (Næss, 1996; Drengson & Inoue, 1996) in addition to eco-socialism. As with the written text, we argue that the illustrations also portray a mixture of eco-socialism and deep ecology.

It is not only Johnson who, through her writing, promotes social environmentalism, but also Sadler, through her use of illustrations. The most distinct example of this comes near the end of the book, where Johnson writes about how Wangari spreads her message around the world to common folk and people in power alike. Here, Sadler illustrates Wangari holding seeds in her hand, with leaves sprouting out from them (p. 35-36). The leaves contain images of people of all different lives and backgrounds, and this represents the titular seeds of change. While illustrations are subtle and open to interpretation, we argue that, based on the complementary writing of Johnson, Sadler portrays Wangari as being able to affect change in the world by means of social environmentalism, through creating awareness of environmental issues, combined with the Green Belt Movement.

Overall, the discourse of both the written language and the imagery is considered positive from the perspective of ecolinguistics (Stibbe, 2014), as it encourages sustainable behaviour towards the environment. While *Seeds of Change* plants environmentally conscious thoughts in the reader's mind, the book does not convey an unrealistic message that the reader can save the world, but rather portrays a message of, what we would call, positive realism. Wangari says, through the writings of Johnson: "We might not change the big world but we can change the landscape of the forest" (p. 26). This type of message narrows down the objective of environmentalism, and makes it appear easier to overcome. This can inspire hope in the book's young readers. Many ECL works use this rhetoric as well, but *Seeds of Change* encourages more social environmental actions as opposed to private ones. The book ends with Johnson reinforcing the message of not necessarily saving the world, but simply improving one's surroundings: Wangari, remembering "her girlhood lesson of the mugumo, [...] understood that persistence, patience and commitment [...] must be planted in every child's heart" (p. 38).

From a book where near all of the plot is viewed from the perspective of humans, we move on to analysing *The Animals of Farthing Wood*, where we are shown the consequences of human interference through the eyes of animals.

4.4 The Animals of Farthing Wood

The Animals of Farthing Wood was originally a book series written by Colin Dann, the first book being written in 1979, which was followed by seven books: one prequel and six sequels. The first book was in 1993 made into an animated TV-series produced by the European Broadcasting Union. The cartoon was a big hit, and its illustrations and tweaked narrative was, with the help of artist Stuart Trotter, turned into an illustrated book the same year as the series was released. It is this version we have chosen to analyse in this thesis, as we feel its lower page count and illustrated pictures are better suited for our purposes. The back cover states that "This edition of the popular children's story has been written and illustrated especially for younger readers.", which gives it an edge over the other version, especially in an EFL classroom.

The book stars a cast of animals, living in a presumably English forest called the Farthing Wood. The forest is being threatened by humans chopping down trees, polluting the water, and generally making the habitat unliveable, so the animals hold an Assembly and make the decision to migrate to someplace safer. The fox is appointed the group's leader, and the toad

the guide, as he knows of a nature reserve called White Deer Park where they might be more secure. On their pilgrimage, the group faces many obstacles, most of which originate from human actions, and some of the animals do not make it. At one point, Fox meets a vixen, whom he wishes to have join their ranks, as well as become his mate, and so they gain a new ally, instead of losing one. They also add a heron called Whistler to their party. His name comes from the fact that he has a hole in his wing that makes a whistling sound when he flies. The hole is actually a bullet wound from when a human shot at him with a shotgun. He no longer has a flock of his own, and wishes to journey to the reservoir with the gang. The final obstacle they need to overcome is a 6-lane motorway, with heavy traffic both directions. All but two of the hedgehogs were able to cross safely. They take a moment to mourn their fallen comrades, then push on into the White Deer Park, where they are greeted by the habitants, and given a place to rest.

You can find discourse about humans' destruction affecting wildlife strewn throughout the whole book. On the first page of text, Tawny Owl states that "The men have filled in our pond." (p. 7), making it clear from the get-go that the author holds humans responsible for the situation the animals find themselves in. The animals' habitat is being demolished by the pressing industry of man, leaving them destitute without a second thought. The first chapter keeps this idea going as the description of the forest's destruction is intertwined with the progress of whatever project the humans are pursuing. "Three quarters of the wood have gone already. Brick and concrete have taken its place. We've been driven back and driven back." (p. 8). It is not just that their homes are being flattened, torn down, or filled in, it is that the humans are doing it of their own volition, and for their own ends. The animals' lives are rendered less important than the humans' enterprise. The anthropocentric mindset (Guha & Alier, 1997, p. 17) leaves no room for animals to inhabit their natural spaces. The animals fear the humans that live outside the forest as well. While they hold their assembly, Pheasant tells the rest that he and his mate "don't venture outside the wood. We're game birds and liable to be shot at." Even before the humans started demolishing their homes, the animals saw humans as dangerous to their wellbeing.

The next large incident in which the discourse is presented is when the forest fire breaks out. Some of the members have close encounters with the blazes, but all make it out alive. Afterward, Toad laments: "All this destruction from one human's carelessness. A cigarette thrown from a car! How many creatures have died because of human thoughtlessness?" (p. 35).

The onus is on the humans, and the consequences are felt by the innocent wildlife and plants that happen to be in the vicinity. The word choices tell us that the author does not believe the humans commit these acts out of evil intentions, but out of apathy. The discourse put forth is saying that human carelessness is destructive towards nature. It does not matter if the actions were not intended to cause any harm if their consequences are that dire.

In the chapter "The Animals are Trapped", the group needs to weather out a sudden rainstorm, seeking shelter in a shed on the farmlands. Here the pheasant couple who have been with the troop since the beginning, are shot by the farmer. The paragraph is written from the human's perspective, and is written with mostly negative language. "He was in a black mood. His crops were being ruined by the weather and he had lost four of his chickens to a fox" (p. 38). His walk around the farm is described with the words "stumped around" and "trudged unhappily". Framing the farmer as a negative character reflects on humanity as a whole, as he is the only human who we get to follow in the whole book. On his way back, he sees the pheasant, "fires clean through it" and shoots the mate second. He sees this as "some consolation" for what he lost to the storm. When he discovers the animals hiding in his shed, he places his dog to guard its door, and goes home to reload his shotgun. When the animals escape their predicament, the farmer verbally abuses the dog for failing to keep them there, curses him, and sends him after the escapees. The actions of the farmer show him in a poor light from the animals' perspective, but the word choices give us as readers the same impression. The negativity in his introduction tells us that he is a bad man, and the cold description of his killing of the pheasants emphasises his lack of compassion towards the creatures. The author is showing us humans as people with no consideration for animals' innate value; living beings with a right to live outside of humans' sphere of influence. The humans who bulldoze their homes are the same as those who kill without a second thought.

The words used to describe human actions often have destructive, or threatening connotations. On page 8, some of the animals discuss the humans' ways, and every verb related to human acts carry these connotations: "cut down", "... work fast when they're destroying...", "Tearing, ripping, crushing...". This continues on page 20, when the next day begins, and the humans are at work again: "All the next day the bulldozers crashed through Farthing Wood, flattening more of the trees. The animals cowered in their lairs and tunnels, quaking at the sound and longing for darkness.". The animals view the humans and their machines as "monsters" (p. 23), which can be seen as a reflection of the view of their actions as well. Treating living beings as

if they have no rights, innate value, or sentience is monstrous. The author, by portraying humans as the villains, and giving them the trait of having no respect for the value nature holds, can be said to promote deep ecosophy (Næss, 1996; Drengson & Inoue, 1996).

The discourse described in the book is not so much about the animals' worth than the humans' deeds being reprehensible. The only way the book takes a side with the animals is by portraying the story from their point of view. Otherwise, the author does not make sympathetic remarks towards them. You care about them as a reader because the opposition is in the wrong, not because the animals are shown as good. The author appeals the reader's sense of justice. When the humans destroy the forest, their deeds are negatively described, and the animals respond with "our forest is being threatened". The action is unjust, and the reader chooses to side with the victims, not because of empathy, but because siding with the humans would be wrong. The discourse on display shows human actions as negative, but rarely shows the animals as positive. The readers are persuaded to the animals' side through implications of goodness, rather than something found with in the text itself. We believe the text would hold greater value as an environmental work if the author focused more on presenting the animals as valuable in their own right, rather than good only because humans do reprehensible acts towards them. The argument is on the side of deep ecosophy (Næss, 1996; Drengson & Inoue, 1996), but is still somewhat lacking.

We can do an iconological analysis (Machin & Mayr, 2012, p. 31) of some of the images in this book in order to continue exploring some of these ideas. Within the illustrations, we are shown a different angle of the same discourse we read in the text. The few times we are shown humans reacting to the animals, we see surprised expressions. The humans are never expecting animals to be in their vicinity, and react appropriately with a startled look. The illustrator is telling us that they give so little thought to the animals living their lives in nature, that just seeing them seems out of the ordinary. It is not a leap of logic that the humans can guiltlessly destroy the forests when they have no notion of the animal lives that such actions would impact.

On page 39, when the group has taken shelter from the rain, the shadow of the farmer is seen through the window. Logic tells us as readers, that as the animals occupying a space they are not welcomed in, this faceless, looming silhouette is a threat. We know he is going to harm them when he finds them, and we are correct in that assumption. Later when the animals have escaped capture, we see the same farmer berating his dog for letting them get away; yet another example of human cruelty as presented by the illustrations in the book. We see how almost no

humans are presented as having a kindly disposition towards animals, and more often than not, they are negative.

An outlier here is when the hunting party are first revealed (p. 59). Here we see no startlement, but rather what might be described as a neutral determined look. They are using animals in their hunt, and reasonably, therefore show no surprise at the animals being there. The discourse found within the illustration of the hunting party can be described as humans dominating animals in order to hunt other animals. Both the pack of dogs, and the two horses have little say in their relationship, and obediently follow the humans' directions as they give chase to the wild animals. Once the game enters the frame alongside the hunting party, the expression of the pursuers changes from neutral to fierce determination. The relationship between humans and animals is by no means positive. As with the previous examples, the illustrations emphasise the discourse of how humans are represented. These semiotic conveyances feed into our iconographical analysis (Machin & Mayr, 2012, p. 31). The reoccurring expressions of negative emotions give weight to our conclusions that the humans act domineering, destroy, or generally hold a negative disposition towards nature in this book.

There are two examples found within the illustrations of humans not being hostile towards animals. The first being the fire fighters, quenching the forest fire on page 34. They have no reaction to the animals, as they are hiding in that frame. There is little to be counted here as a part of the discourse, as there is no interaction between the two parties, but it should be mentioned. The second instance is while the animals are crossing the freeway during the traffic stop. One of the humans sitting in a car on page 70 has a subtle smile on her face, indicating pleasure at the sight of the animals. This might be the illustrator telling the audience that there exists humans with positive feelings towards animals in order to bring nuance to the impression the reader might be left with after reading through the book.

The book has themes of environmentalism, humans being a threat towards animals, deforestation, as well as tolerance, friendship, and hope. There are many instances of human actions being the origins of the obstacles the group has to face. On the first pages, it is the deforestation, land flattening, and filling in of the pond that drives the animals away from the woods. Then the forest fire, the farmers, the hunting party, the highway, and the flood are all dangerous obstacles originating from human actions (the last one only speculatively). We are never told that any of these things lead to anything good, which leaves the reader with only bad impressions of the whole affair.

An important theme in the book is cooperation. Despite the animals being naturally predisposed to act as predator or prey towards each other, they put it all aside in order to have a better chance of reaching their sanctuary. This pact of mutual protection (p. 19), acts as a binding agent between the animals, strengthening their bonds, and making it possible for the largest number of animals to survive the treacherous journey. It can be interpreted as a metaphor for our own need to put aside our differences as humans, in order to fight the environmental destruction we are all threatened by. It is shown many times in the book that cooperation is instrumental to the survival of each member of the group. Although the bigger animals more often do the heavy lifting of keeping everyone away from danger, each of the smaller ones at some point carry out a task that could not be done by any other. The first example is that Toad, despite his low stature and slow pace, is the guide on this pilgrimage (p. 17). His knowledge is absolutely essential for the continued survival of the group, and he is the first individual who needs assistance to overcome the first obstacle, the road. When they reach the road at the first dawn, the group is exhausted, but still need to cross before traffic starts. Toad is unable to continue, but is carried by Fox, narrowly escaping being flattened by a car.

A second example is Mole, who at first does not want to join, as he is afraid he will delay the group because of him being the slowest animal there (p. 21). When he is allowed to ride atop Badger, he is much less of a burden, and later proves to be useful in the group escaping imminent danger, when a farmer has them trapped in a shed (p. 39). He is the best digger among them, and is able to start a tunnel that leads them out to safety. His skillset did not include swift running, but it still had its niche.

A third example is Adder, who, although having a nasty attitude, and sometimes threatens the smaller animals with breaking the oath, saves the group by single-handedly stopping the hunting party and their animals by spooking a horse so it throws its rider off (p. 65). This disheartens them to the point of giving up the hunt. Her helping the whole group leaves them able to help her at a later time when they have to cross the busy highway, something she would not have been able to do without aid.

By working together, they are better able to fight off the humans, overcome the obstacles, and ensure the survival of the largest number of animals. Not all were able to make the entire journey, but there is no doubt that most, if not all, of them would not have been able to if it were not for everyone contributing towards the cause. This sentiment rings true for our world outside the pages as well.

4.5 The Last Wild

The Last Wild is authored by Piers Torday and was published in 2013. It is Torday's first novel, as well as the first in *The Last Wild* trilogy. The book consists of six parts and 326 pages, which makes this the longest ECL work of our analysis, by far. It is almost exclusively comprised of written language, with a map displayed at the start of the novel acting as a visual aid being the most prominent illustration. This is a deviation from the other works we have analysed, all of which have been picture books. It is nonetheless targeted at children aged nine to twelve, which makes it relevant for our analysis.

The book is set in a fictional post-apocalyptic world where all the animals, apart from varmints, are supposedly extinct, and we follow the story from Kester Jaynes' view, a young boy. Kester is mute, and is held in a facility for troubled children, called Spectrum Hall. One day, his window is shattered by a flock of pigeons which, to Kester's disbelief, talk to him. He is spirited away by the pigeons, along with a brash cockroach called the General, to a place where some animals have survived. A mysterious virus called the red-eye has driven most animals to extinction, but a few have indeed outlasted it. Kester is informed that he has the power to save the remaining animals, and because his father is a researcher, Kester suggests that they find him in order for him to develop a cure for the red-eye. On the way to finding his father, there are many twists and turns, but they do eventually track him down. Kester's father is partially successful in developing a cure. The story ends on a cliffhanger, however, as Kester, his father, and the remaining animals understand that the fight for survival is not over. The story continues in the two sequels, but we will not take them into account in this discussion.

There are several overarching themes in the story, many of which touch on the subjects of nature, environmentalism, capitalism, and corporate greed. In the following section, we will be analysing these themes, in addition to analysing the book's discourse and judging its attitude towards the environment.

The book, in addition to its six parts, is split into semi-chapters. We have decided to call them this, because the "chapters" have no title, only minimalistic silhouette drawings. These drawings are the only images in the book apart from the map at the start. The drawings always depict an animal or a bug, and they act as a hint to the reader on what they can expect in the following chapter. For instance, when the drawing is of a cockroach, the chapter heavily involves the General, who often sits on Kester's shoulder and offers stern advice. When the

drawing is of a cat, the chapter centres around a sassy cat called Sidney. As readers, we are essentially given a preview of what the chapter will be about, without being given anything meaningful away. The drawings complement the text; they offer additional information to the reader without explicitly stating it, which is one method of multimodality (Kress & van Leeuwen, 2001, p. 20). The book is rather long, and for children to consume all its material without any visual aids would likely lead to them not finishing it. Putting in these small drawings is a clever way of portraying information, as it offers an added dimension to the reading experience.

As mentioned earlier, the book is set in a post-apocalyptic world and, as with many post-apocalyptic works, parallels can be drawn to the potential consequences of ecological collapse. Although not specifically stated, humans have contributed to the current environmental situation in *The Last Wild*, where the red-eye virus has wiped out most of the animals. In the book, the origin of the virus is unknown, and specific blame on humans is not placed. However, there is a degree of anti-capitalist sentiment from Torday, as he writes about how the world's largest food manufacturer, Factorium, took advantage of the situation. Kester's father was a scientist working for Factorium, some years before the story starts. Nearing the end of the book, Kester asks his father why the company's CEO Selwyn Stone rejected his cure for the virus, and instead framed his father for creating the virus. Kester's father responds:

Why did they do it? I'll tell you. *Formula*! I had invented a cure that could save the last few animals in the world, but what I didn't know was that Selwyn had just invented formula. The magic chemical that replaces food. Stone's success now depended on there being no more animals. Nothing else to eat at all. And that's exactly what happened. Factorium killed all the remaining creatures left alive and became very rich. Very rich and very powerful. (p. 312-313, emphasis in original)

Here, Torday leaves little to the imagination in regard to his feelings on capitalism. It is clearly stated that the desire to acquire wealth leads to a worsening of *The Last Wild*'s dire situation. Waheed and Khan (2021), in their research paper on *The Last Wild*, argue that the "exploitive (*sic*) capacity of capitalist culture is embodied in the character of Selwyn Stone" (p. 819), and that Torday openly criticises the ideology. As previously mentioned, ecolinguists like Stibbe (2014) and Halliday (2001) also link capitalism to ecological decline, and argue that the discourse in Western society exacerbates the issue. Torday attempts, explicitly, to showcase to

his young readers how capitalism can be detrimental to nature, and it is most apparent in the aforementioned quote.

The final faction of the book that has not been mentioned yet are the former farmers. Before they are introduced, Kester comes upon their territory, and the land is described as the following: "Here and there are ragged islands of drooping pale brown stalks - which must be all that remains of what once grew in this giant field, now just rotting into the ground" (p. 203-204). We see a clear example of how the red-eye has destroyed the environment, killing the ecosystem in place, bringing about ecological collapse, and now everyone is suffering the consequences. The mouse character that joins the wild tells us what happened to its horde of fellow mice: "But the problem was, you see, it (the red-eye) took away what we was going to eat. No bee nectar, no fruit, no grubs – and then they even took the crops away." (p. 216). To the mice, the plague meant starvation because it killed essential pieces of the ecosystem. A while later in the story, our protagonists are taken captive alongside their animal companions. The farmers are preparing a feast, planning to eat their first meal with meat in a long time. The feast is accompanied with drums, dancing, and a sacrificial killing of the stag, having turned the situation into something likened to a ritual. The farmers are unwary of the consequences of their rash decision to eat the animals. Doing so would condemn the species of the slaughtered animal to complete extinction, leading to ecological collapse, leaving the ecosystem in a state it would be unable to recover from.

There are other instances where Torday negatively describes the man-made effects on the world. The formula that Factorium created is described as an indelicate pink goop, tasting of prawn-cocktail crisps. The centre for troubled children that Kester stays in at the start of the book is grey and depressing, with lifeless walls and joyless rooms. When Kester reaches the city where his father is near the end of the story, he describes what he finds in an inner monologue: "[...] slums filled with rickety sheds, caravans, and piles of rubbish. Steam and another smell rises up, the smell of something oily that makes *me* gag" (p. 280, emphasis in original). The world that humans have created is woeful; the discourse Torday uses is clear and closed to interpretation.

Compared to how industry and man-made structures are described, nature is depicted in a distinctly different manner in *The Last Wild*. When describing nature, Torday uses a large degree of personification. The sea "roars and crashes" (p. 53), while a river is "foaming white [...] roaring and crashing" (p. 170). The "shores of the lake are alive" (p. 64), and "the wind is

whispering" (p. 197). Paths are "twisting and turning" (p. 261), and fire "sizzles back in reply" (p. 234-235). These are only a few examples of personification found in the book. Describing nature in such a way has the distinct effect of making nature feel alive. All carbon-based lifeforms are just that; life, but personifying it brings direct attention to this fact. This could be a strategy from Torday in order to make his readers aware of how we must take care of all life around us, as well as to make us more empathetic towards it.

It is also important to note how the mood of the main character Kester affects the way he perceives nature in the moment. After the shocking revelation of how Factorium exploited the virus outbreak for their own economic benefit, Kester is, understandably, in a foul mood. He describes the sky as "black" (p. 313), whereas earlier the nature around him had been "beautiful" (p. 58). This could also be one way Torday lets his feelings towards capitalism be known, almost directly linking the practice to darkness. At the end of the book, when Kester's father has managed to develop a prototypical cure for the virus, the mood is better. Now, the river "sparkles in the light" (p. 313), while butterflies "flutter around the rose bushes" (p. 313). A pessimistic view of this could be that humans are only able to appreciate nature, and thereby take care of it, when they feel inclined to do so. It is important to want to take care of it no matter what one's frame of mind is. Fostering an ecosophy of deep ecology (Næss, 1996) would go a long way in this endeavour.

The topic of climate justice in *The Last Wild* is important to discuss. Climate justice, as previously mentioned, essentially describes how the ones who suffer most from ecological decline are the poor and unprivileged, and how they are made to pay for the actions of others. Due to the unjust nature of climate change, some scholars have taken to naming the term climate *in*justice (Damico et al., 2020, p. 688-689). In *The Last Wild*, the unprivileged and defenceless who suffer most from the outbreak of the red-eye virus are the animals. Not only does the virus slowly extinguish them, but the remaining healthy animals are brutally hunted down and killed. The virus is not explicitly said to be caused by humans, but as Kester is confronted by a wolf, we hear the point of view of the animals under the thumb of human domination: "You brought about this disease, human. That is all humans bring with them: disease and death" (p. 79). The animals automatically assume that the humans are responsible for the virus, and even though they may not be, one would be hard pressed to blame the animals for their viewpoint. After all, they are being hunted down, not for sustenance or anything directly useful, but for the sake of profit and power. The victims of human destruction and

ecological decline are, as Stibbe (2014, p. 119) also argues, the voiceless; the forests, the plants, the rivers, and most prevalently in *The Last Wild*, the animals, are unable to speak up and resist.

However, Kester has the power of the voice and is able to speak to the animals. This gives the animals a voice; through Kester, the reader is able to understand the pain and plights they suffer. It would not be unreasonable to assume that Torday is drawing a connection to the Lorax, the famous children's book character, as the two share many characteristics. Both are the chosen defenders of nature, and fight against a corporation seeking to destroy as much of the environment as possible. While the Lorax proclaims: "I am the Lorax. I speak for the trees. I speak for the trees, for the trees have no tongues." (p. 23), a similar sentiment echoes about Kester: "You are a boy who can hear us and speak for us." (p. 71), and "You say you speak for animals" (p. 263) The most famous line from The Lorax: "UNLESS someone like you cares a whole awful lot, nothing is going to get better. It's not." (p. 58), is similar to something said by the Stag when he is trying to recruit Kester in The Last Wild: "It will be the end of us unless we get help from the humans." (p. 88). They both know that stopping the destruction of the environment requires the will of someone who truly wants to save it. Kester and the Lorax are comparable in that they fight for nature by trying to provide a voice to the voiceless. Nature, being unable to articulate its plight when faced with industrial forces, can only rely on these characters to show humans the harm they are causing. Both the characters' messages fall on deaf ears; industrial progress never even slows down until it is too late in the case of the Lorax. The last glimmer of hope comes at the end where a young boy is given a seed to do with as he sees fit. At the end of *The Last Wild*, there is a vaccine, and there are still a few animals left alive, making the ending a more hopeful one, as it is not a complete reset of the whole ecosystem, compared to the one annihilated in *The Lorax*.

The Lorax as a character has been compared to the children of the new generation in articles. In Matthew Teorey's article "The Lorax and Wallace Stegner: Inspiring Children's Environmental Activism" (2014), he draws a parallel from how the Lorax is spoken to by the Once-ler, the antagonist of the story, who represents corporate greed, to how children are often spoken to by belittling adults: "The faceless Once-ler expresses an adult deafness and blind arrogance, ignoring the voice and feelings of the diminutive, child-like Lorax" (Teorey, 2014, p. 330). Phrases like "I'm busy" and telling the Lorax to "Shut up" so he can work, are tropes found in the book which are often given to authoritative parents who do not want to listen to their children. This then gives us another point of comparison to Kester, who has to fight the

adults' prejudice towards children, who are viewed as stupid or ignorant. Lastly, we can compare their physicality. The Lorax' diminutive stature resembles that of a child. In his quest to stop the Once-ler from destroying the environment, he cannot resort to violence or force. This could be because of his size. Kester is similarly unable to use force as a tool in his endeavour, as every adult he comes into conflict with outmatches his strength. The two characters' only way of combating their adversaries is through their words.

On the topic of the power of a child's voice, in her article about how nature is portrayed in children's literature, Jennifer Wagner-Lawlor argues that using the literary device of giving a voice to nature has the effect of illustrating for children that they are able to speak out against the abuse perpetrated against nature. They are shown that they have a power that is necessary for combating this injustice. Teaching children this lesson is an important leap in helping them become global citizens. As Wagner-Lawlor (1996) puts it: "For giving voice to those who have no voice in a system of power is, after all, what representation and activism--what advocacy-is all about." (p. 151). This can be connected to how Kester and Polly act as proxies for the entire generation of young people who see the injustice perpetrated by adults but are unable to make them listen. The two children are more connected to nature, as they have not had society cloud their eyes with destructive ideologies. They have not been indoctrinated into believing that nature is strictly a resource to be extracted to make a profit. They still see the value of nature for its own sake, and they need to use their power to give voice to nature's plea.

Many works in ECL boil down to messages of heroism, and the notion that everyone, even young children, can make a substantial difference in the world. Waheed and Khan (2021) argue that this is the case in *The Last Wild* as well. They claim that Kester and Polly, a girl Kester finds on his travels, are the last beacons for the non-human world, and that Kester and Polly's showing of "young adult agency [...] not only reflects the hope for the future but restores the faith in the goodness of humanity whose actions can save the world from destruction" (Waheed & Khan, 2021, p. 822). We agree that *The Last Wild* sends a positive message to its readers, and that its young audience can be inspired by its themes of teamwork and friendship.

However, we argue that the book also strikes a tone of realism. The book ends on a positive note, but it is not a complete victory for Kester and the animals; the cure Kester's father develops is only partially successful. The stag that accompanies Kester for much of his journey also makes an astute observation when Kester has failed to save an animal from death: "You cannot save us all, Kester. You cannot save everyone and everything" (p. 190). Most ECL

works fall back on overused messages about how you can do whatever you set your mind to, and while these messages mean well, they can lead to disappointment in an impressionable reader's mind when they try to save the world but ultimately fail. Instead, *The Last Wild* focuses on what Kester *can* do, instead of what he cannot do. The book promotes good intentions, and manages realistic expectations.

The book is told from Kester's point of view, and as a young boy, the world is filtered through his youthful and innocent eyes. Despite his rough upbringing in a centre for troubled children, he is not down-beaten and pessimistic about the nature he observes. As Kester is riding on the back of a stag, he describes the open country as "smooth and wide" (p. 96). Perhaps the most explicit example of how he views nature comes when he is brought to the lake where the remaining animals live:

I have never seen anywhere like this before. It certainly isn't anything like home. There's a massive pond, more like a lake, with only tiny spots of sun able to squeeze through the leaves above, making the water glitter. Silvery trees line the edge, with ferns and reeds clustered around their base. Not trees I've ever seen before. Everything looks all... old. Proper old, in fact. And -I don't want to say the word, but there's no one here to tease me for saying it - it looks beautiful. (p. 58)

The discourse used by Torday here is clearly nature-friendly. Glittering water, silvery trees, tiny spots of sun; this discourse creates positive images in the reader's mind, and puts nature up on a pedestal. The last part of the paragraph is the most telling: "it looks beautiful" (p. 58). Torday grew up in Northumberland, which is "possibly the one part of England where more animals live than people" (Torday, n.d.), according to himself. Growing up in such a picturesque location would understandably lead one to develop a keen interest, and love, for nature and its creations. He would want to preserve it, and encourage others to want to preserve it as well. We argue that is what he does in *The Last Wild*; through his main character Kester, Torday presents his personal love for nature.

5. Classroom application

We have now analysed our selected books; in terms of plot and themes, but more importantly in terms of their discourse relating to environmentalism, sustainability, and, more broadly, nature. As a reminder, our second research question relates to how these books can be applied to the classroom:

"In what ways can teachers use these books to teach primary school pupils about environmentalism and sustainability?"

As we have argued, we deem these books appropriate for various grades in primary school, and this section will have a targeted focus on how one could put the books to use. We would recommend using the books in the intended order for the grades we suggest, as the themes and messages build on each other. It is important to make clear that we are merely proposing suggestions concerning how a teacher could go about teaching about the topics of nature, environmentalism, and sustainable development; we are not presenting clear-cut solutions. That is not to say that we are simply hurling out ideas with no regard for their pedagogical efficacy; we have based these suggestions on previous research, combined with our own critical judgement as teachers. It is also important to make clear that we do not have an actual class of pupils in which to demonstrate these suggestions, thereby making them hypothetical. We argue, however, that these are good suggestions to attempt in any classroom, and we urge prospective teacher-readers of this thesis to try them out for themselves. All the books we are making suggestions for should be read by the teacher before-hand, in order to maximise the effectiveness of teaching about it.

It is also important to note that no matter the subject one uses these books in, English will be a component as the books are written in English. One is encouraged to incorporate English in one's lesson even if it is in another subject than English, in order to increase the pupils' English proficiency. This way, one can perform English language teaching (ELT) regardless of the lesson's subject. It has been shown that using a language naturally in other areas, such as teaching various school subjects, is a highly efficient way of acquiring a language. Using what is called Content and Language Integrated Learning (CLIL) is a better way to achieve second language acquisition, because the focus is on communicating in that particular language in other areas than the language itself (Marsh & Langé, 2000). This method has inspired how we

seek to incorporate English learning in all our suggestions, no matter the subject the lesson is taught in. This way, every classroom has the potential to be an EFL classroom.

5.1 The Very Hungry Caterpillar

As previously discussed, there is a large consensus among scholars about the fact that children should experience their local nature early on in their lives, in order to develop an appreciation for nature and a willingness to take care of it in the future (Rowe, 2019; Zynda, 2007; Pyle, 2002; Louv, 2006). As such, we believe a good strategy for using *The Very Hungry Caterpillar* (Carle, 1969) in a classroom involves being, at least partly, outside in the local environment. In Norway, we are lucky to always be near nature at all times, and one can use this to one's advantage as a teacher. The following section will contain realistic suggestions on how one can use *The Very Hungry Caterpillar* in the classroom.

The Very Hungry Caterpillar is the shortest book we have chosen for this thesis, both in terms of the number of pages and words. Its language is simple and concise, and the book is filled with vibrant images of a caterpillar's life. We argue that all these components, combined with the fact that vibrant colours and images appeal to young children (Boyatzis & Varghese, 1994, p. 79), would make this book suitable for pupils in the 1st grade. It is important to note that the readers of this thesis will likely be teachers in Norwegian classrooms, where English is a foreign language. Even though Norwegian pupils in the 1st grade may not understand all the words in the book, there are many different ways one can communicate the book's general message as a teacher, some of which we will discuss shortly.

There are many different subjects in which one can use *The Very Hungry Caterpillar*, as the book touches on a variety of themes. The subject that perhaps sticks out the most, is natural sciences, as the book is heavily focused on nature. It details the journey of a caterpillar into a butterfly, and depicts various fruits and vegetables throughout. The book could therefore be a good basis for a natural sciences lesson, where the pupils could learn about the biology of caterpillars and butterflies. Another subject where one could use the book is arts and crafts. Given young children's fascination with vibrant and lush colours (Boyatzis & Varghese, 1994, p. 79), they could easily be inspired by the book's images. As a teacher, one could organise for the pupils to make drawings based on the book's images, where they might explore using different colours to make their own representations of nature. As sustainable development is a cross-curricular topic in the new core curriculum for Norwegian schools (Ministry of Education

and Research, 2017), it is important to develop children's appreciation for nature, and thus increase their knowledge of and inclination for sustainable development, through these different subjects. We therefore suggest using the book not just in one subject, but in many.

A more specific suggestion for how one could use *The Very Hungry Caterpillar*, comes in the English classroom. At the start of the lesson, we would recommend reading the book aloud for the 1st grade pupils, along with a projection of the book's images, clear for the pupils to see. Research has shown that children's "aural comprehension ability" is more evolved than their "word recognition competence" (Beck & McKeown, 2001, p. 10), and therefore reading aloud would be more effective for the age group in question than having the children read the book on their own. More to the point regarding foreign language acquisition, reading aloud in a foreign language could help bridge the gap between the pupils' first language and the foreign language in question (Senawati et al., 2021), although it would not be enough for the teacher to simply read the book aloud without further ado. Senawati et al. (2021) shows that the teacher is key in developing their pupils' skills in English as a foreign language (EFL); the teacher should find a suitable topic for the age group, along with emphasising key words and phrases, and pauses for effect (p. 80). We argue that *The Very Hungry Caterpillar* is highly suitable for pupils in the 1st grade, and one should follow the advice of Senawati et al. when reading it aloud for one's class.

Simply reading the book aloud for one's pupils would be over quickly, however, and we argue it would be insufficient in regard to developing the pupils' EFL learning. For an extended English lesson with *The Very Hungry Caterpillar* in focus, we propose that after the book is read aloud to one's pupils, they would be sent outdoors into nearby nature. This lesson would be inspired by the *in*-component depicted by Sinnes (2021, p. 70), where the pupils are *in* nature. There, they would be encouraged to seek out objects they have just heard and seen from the book. This may include the various fruits and foodstuffs the caterpillar finds on its journey, but these are unlikely to appear naturally in one's local environment. The pupils would be more likely to find trees, like the one the caterpillar climbs down from, and leaves, like the one where the caterpillar is born. Finding insects like a caterpillar is plausible, and the pupils should be encouraged to treat any insects they find gently and with care. The goal is, after all, to foster an appreciation in the pupils for the environment around them, and this entails leaving nature as one found it. Insects should not be harmed; leaves should not be plucked from plants; only fallen leaves should be collected. This way, the pupils could begin to foster a sense of deep

ecology—the ecosophy of all nature's creations having intrinsic worth (Næss, 1996; Drengson & Inoue, 1996)—as well as a love for nature. Afterwards, the leaves or other plants they scavenge could be dried and framed, with each pupil keeping their own find.

One could argue that a lesson plan such as this would not have a significant academic impact on the pupils. They would not be lectured about biology or told about the climate crisis we are currently experiencing. However, that would not be the purpose of this lesson either. As we have previously stated, the goal of the lesson, and *The Very Hungry Caterpillar*, would simply be to instil an appreciation for nature in 1st grade pupils. We argue that they are too young to be faced with scary details of climate breakdown; they should rather become more familiar with nature in their area. This notion of exploring one's local environment has, after all, been shown to be effective in this regard (Rowe, 2019; Zynda, 2007; Pyle, 2002; Louv, 2006). Showing the effects that humans can have on the environment, and therefore the importance of sustainability, can take place at a later stage of the pupils' schooling.

5.2 The Tiny Seed

The Tiny Seed is, as previously mentioned, is also authored by Eric Carle. We make a point of using the same author twice, as their shared aesthetic and vibe gives the pupils a sense of continuation, which would give them something to latch on to when they endeavour to explore this more complex work. This is not to say that it is too difficult for primary school children to understand, as the sentences are not too long, and the language is appropriate for early EFL students. We think the book is most suitable for students in the 2nd or 3rd grade. The lessons would have similar elements to the ones used with *The Very Hungry Caterpillar*, as the subject matter is still within the same field, that being natural sciences. By keeping multiple aspects similar to the suggestions made for the previous book, the pupils would have an easier time keeping up with the new material.

The iconic art style of Eric Carle works very well in this age group, and opens up the door to many exciting classroom activities. Seeing as the majority of the class would likely consist of students who are very early in their English competence development, using engaging books with clear imagery would be a great boon. By giving most of the text's content a corresponding illustration, the pupils would be able to understand the narrative, even if they cannot read every word.

Before going into some of the cross curricular subjects one can use this book for, we will discuss how one should go about reading the book with the students. By reading the book first, the subsequent lessons can be based on this initial one, opening up for discussions and activities in other subjects. The text is likely too difficult for the typical 2nd and 3rd grade pupil in the EFL classroom to read by themselves, and would need help from the teacher or a parent when first reading it through. Expecting the school to have enough copies of the physical book is unreasonable, but the pupils would still need to see both the text and the illustrations. The teacher can organise the classroom to accommodate this, either with a literature circle, a PowerPoint presentation, or paper handouts of the book. There is also the option of using tablets with an e-book version, if this is a resource the school has access to. Having the children read alongside you would be ideal.

The teacher would have to adjust their language to the pupils' level. They should read slowly, clearly, and meticulously in order for the pupils to be able to follow along. There should be many breaks for discussing what was just read, and explanations for what the pupils found difficult. If the teacher could use some of the pupils in translating some of the sentences, the others are more likely to be engaged, as they might also wish to help out.

Similar to *The Very Hungry Caterpillar*, *The Tiny Seed*'s main objective is to teach children about some aspect of biology, in this case, the lifecycle of a seed. This would make the natural sciences lessons a great place to discuss some of the information they would learn from the book. Complying with Sinnes' *about*-component (Sinnes, 2021, p. 70), the pupils could be taught the subject of how seeds come to exist, and what their journey into their final cause would entail. This could come in the form of a discussion of the book's narrative. What happens to the seed in the story? What does the seed need in order to grow into a flower? What happens after they reach the final stage? The cycle continues. The information would not need to be detailed or too in depth, as the larger picture is much more comprehensive, as well as of greater importance to their early education.

The teacher could go on to talk about what might stop a seed from growing. What obstacles did the seeds face? Some were eaten by small animals. Was this a good or a bad thing? It was too bad that the seeds did not become flowers, but it was good that the animals had something to eat. What did the humans do? Was it right that they crushed the budding flower, and picked the grown one? These are discussions that could lead to talking about humans impacting the environment. Whether it was right or wrong, it did have an effect, and should be considered.

As this would be very early in the stages of talking about sustainability, the subject should only be talked about in the most surface levelled manner. How large the subject is in reality would come later on in their education, so this would be more of an introduction, starting the pupils' thought process on the matters, making way for more in depth discussions.

When using this book, the teacher would have a great opportunity to talk about the importance of seeds and the plants they turn into within their ecosystem. The book quite clearly shows how the other animals benefit from the seeds flying about, and the final pages show how all the insects and birds love the fully grown flower.

One of the activities the teacher could then go on to do with the class is to search for seeds to bring back to class. This would be considered the *in*-component of Sinnes' ways of teaching about the environment (Sinnes, 2021, p. 70). It could be either in one of the lessons at school, or as homework, the point being that the seeds are looked at in class. The pupils would find a larger variety of seeds if they brought them from home, as most fruit and vegetables bought in grocery stores can have theirs picked out and identified. The teacher might want to bring in a maple seed if none of the pupils brought any, as its shape has evolved in order to be better carried by the wind, something which could be brought up as a part of the discussion about the book. By letting the children experience the seed search, they would learn a lot about the environment around them. They would be studying the earthen ground in a different way compared to how they would usually interact with it. They might see that many of the seeds are far away from their point of origin, as they, and just like the tiny seed, have been flying with the wind.

One could argue that the *in*-component should have come first, as having a seed in front of you could enhance the lesson and motivate the pupils, as well as make the information less abstract, seeing as they would have a concrete example in front of them while learning. We think, however, that by allowing the children to pick out their seed, and then bring it to school with the knowledge they gained in the previous lesson in the forefront of their heads, it would lead them to ponder its significance. Had they brought the seeds before they knew their mechanics, the time spent with the seeds in their hands would not have yielded the same effect. They would have seen nothing but a pebble, with some notion of it being organic. By arranging for the pupils to know the significance of seeds before they are taught *in* the environment, they are given a chance to properly analyse and rationalise the knowledge, and thereby acquire it.

Teaching for sustainability (Sinnes, 2021, p. 70) in a 2nd year classroom would not entail lectures about how global economics affect and are affected by their choices, but it could be brought down to a smaller scale. Growing watercress in milk cartons would be a very simple exercise in planting your own food. The project would only require watercress seeds, cotton, water, and a milk carton which would function as a pot for the plants. As long as the cotton is kept moist, the watercress could be harvested and eaten in a week. The point of this exercise would be to show the pupils that not all the food we eat needs to be bought at a grocery store, and that gardening at home can be a sustainable, and repeatable substitute for some of what you often purchase many times a year. The discussion about sustainability would not need to go further than the local environment at this stage. Talking about small choices such as growing some of your own food, throwing garbage in the correct bin, not littering, and so on would give them a good basis for the messages in our suggestions for the later books. Some of these aspects could be connected to *The Tiny Seed*, giving the discussion some concrete parallels, which might make things clearer to the pupils. They might better understand the problem with littering, if they could imagine it hampering a seed's ability to grow. The book shows clearly how fragile the seeds are, and how little it takes for their journey to come to an early end.

As mentioned earlier, the point of these exercises and discussions would not be to lecture about the larger aspects of environmentalism and sustainability, but rather to make the pupils think about their actions. The consequences of picking a flower, or stepping on plants might be very small, but if they are able to reflect on these small actions and their ramifications, they could be well on their way to become ecocitizens (Massey & Bradford, 2011, p. 109), which is what we need from the coming generations.

5.3 Seeds of Change: Planting a Path to Peace

Seeds of Change: Planting a Path to Peace (Johnson, 2010), simplified to Seeds of Change, is a picture book with significant potential as a tool in the classroom. It is a book abundant with positive themes, such as teamwork, environmentalism, and sustainable development. It can be used across many different subjects and, as we will soon discuss, it should not be limited to a single lesson, but rather be used concurrently across subjects. This is to say that while it would be useful in a lesson of one subject, it would be more effective if it was supplemented by more lessons in other subjects. This ties in with subsection 2.5.3 in the core curriculum, titled

Sustainable Development, where it is stated that sustainable development is a cross-curricular topic (Ministry of Education and Research, 2017).

The intended age group for our suggestions ranges from 4th to 5th grade. *Seeds of Change* has more advanced language than *The Very Hungry Caterpillar* and *The Tiny Seed*, as well as more mature themes such as feminism, racism, and capitalism criticism. Children from the ages of nine to eleven would be more able to grasp these concepts than six-year-olds would. We do not expect children to understand these concepts fully; we would merely aim to provide an introduction to them in order for them to start thinking for themselves.

An example of a subject where one could use Seeds of Change is natural sciences. The book takes place in Kenya, which is located in central Africa. This area of the world is home to many different species of plants and animals; the country has a rich biodiversity. The book depicts this biodiversity brilliantly, through its vibrant illustrations of fish, monkeys, and elephants, as well as lush jungle with towering trees. As a teacher, one could make use of this in the natural sciences classroom. One's 4th or 5th grade pupils could be set to work on finding out more about the biodiversity of Kenya; is it really as rich, diverse, and beautiful as the book depicts? One could also use the book as a prerequisite for a conversation about climate change. As previously mentioned, Seeds of Change presents the fight against climate change in a socially responsible manner, something Echterling (2016) praises it for (p. 295). Simply reading it in a natural sciences lesson could help launch a wider interrogation into the phenomenon of climate change and how it affects us and the world around us. Also, reading about how Wangari promotes sustainability through the Green Belt Movement and planting trees could provide knowledge about sustainable development for the pupils. Learning about what sustainable development is, and how one can achieve it, is depicted under the about-component of education for sustainable development (Sinnes, 2021, p. 69). A lesson in natural sciences using Seeds for Change could therefore be useful in increasing the pupils' knowledge of environmentalism and sustainable development.

There are different ways one could use the book in the English classroom as well. Reading the book aloud, like how we suggested with *The Very Hungry Caterpillar* and *The Tiny Seed*, could be an option. It would provide an overview of the book where the pupils could follow along relatively easily; however, reading it aloud would not be the most effective method for this grade level, we argue. In our experience from teaching in practice, pupils in the 4th and 5th grade are past the point of being enthralled by storytelling exercises. They would already have a better

understanding of the English language than when they were in the 1st and 2nd grade, so the pupils would be better served by a more practical exercise, where they could use the language themselves.

We suggest using literature circles, much like how Guanio-Uluru (2019) makes use of the method in her project. Here, we would divide the pupils into groups of three or four and assign them each a role. The roles in question are also based on Guanio-Uluru's (2019) project, where the pupils are either a nature scribe, plant and animal watcher, dystopian detective, or a biotechnology detector (p. 10). In our case, the roles most relevant would be nature scribe and (plant and) animal watcher. The pupils would read the book individually with their assigned role in mind. The nature scribe would be on the lookout for how nature is depicted; plants, trees and general flora would be examined. The (plant and) animal watcher would have a narrower focus on how the animal kingdom is represented; is there negativity or negligence towards them? More than one pupil could have any one role, as they are likely to have different perspectives and, in turn, have more findings this way. Afterwards, they would discuss their findings in their group, using English as the language of conversation. This would open up for learning not only in English, but also about environmentalism and how nature is depicted in the book. This type of lesson could be considered as learning for sustainable development the for-component of ESD (Sinnes, 2021, p. 70)—as reading about and examining how Wangari inspired a nation to act more sustainably, could implicitly teach the pupils how they themselves can be more sustainable.

We argue that *Seeds of Change* could also be used to great effect in the social sciences classroom. From the books we have made pedagogical suggestions for thus far, there is no doubt that *Seeds of Change* is the most socially aware book. It is very explicit in its critique of corporate greed, and capitalism as a whole is subtly critiqued to an extent as well. Topics like feminism in an environmental setting—also known as ecofeminism—and climate *injustice* are also present in the book. Combined, these topics could serve as a basis for a lesson in social sciences. As a teacher, one could start a conversation about how climate change disproportionately affects the poorest and least prepared communities in the world, and how it is even more unfair that they have participated in that change minimally. One could implore one's pupils to find out more, such as researching information on the internet, about how women are oppressed in the world and, perhaps especially, in Kenya. One could show one's pupils that it is possible for them to make a meaningful change against climate breakdown,

through writing to politicians and practising "pester power" (Wilson, 2010). We have seen Greta Thunberg make the world turn their attention more to the power of youth in the fight against climate change, through her use of "pester power". We argue it would therefore be possible to inspire one's pupils to follow in her path, by highlighting these issues for one's pupils and showing them how they could be part of the solution. This ties in with the *as*-component of ESD (Sinnes, 2021, p. 70), because pedagogical ideas like this would act *as* education for sustainable development in their own right, as they would show pupils explicitly how they could act in order to promote sustainable development.

5.4 The Animals of Farthing Wood

Seeing as the *Animals of Farthing Wood* is longer than the previous books, has a slightly elevated level of complexity of words, as well as the fact that it holds some dark themes, including death, animal abuse, and grief, we think this book should be saved for 6th grade pupils. The fact that humans are portrayed as the villains of the story, adds some nuance to the message, which adds to our conclusion. We believe these ideas are better appreciated by slightly older pupils. The illustrations are less ubiquitous, meaning the younger pupils are less likely to want to push through all the text. Children at the age of eleven, should have no problem with this book, however. The story of a ragtag group of animals of different species, working together, facing multiple dangers, and triumphing in the end would be well liked among them. The topic of environmentalism is the most pervasive, as it is a part of both the instigating incident, as well as most of the following obstacles on the animals' journey. Working with this book would open many opportunities for discussions, learning, and activities relating to environmentalism and sustainability with the class.

When reading through the book, we think the pupils themselves would be capable of doing so by themselves. The amount of time it would take depends on how many lessons the teacher could allocate to English, as well as the resources they would have at their disposal. Ideally, the school would have access to tablets or laptops on which the pupils could read an e-book version of the text. If not, printing out paper copies and letting them read one chapter each lesson should suffice. The teacher would in a later lesson, after the pupils have all read the book, start a discussion about the narrative, themes, and literary devices in order to further develop their reading comprehension. The class would be going through each chapter and

discuss how human actions affect the animals in the story, and point to specific parts in the text where the discourse is made clear.

When the pupils work with this book, we would suggest organizing reading circles consisting of three to four people. Each pupil would be assigned the reading role of either plant and animal watcher, or nature scribe, as described in Education for Sustainability: Developing Ecocritical Literature Circles in the Student Teacher Classroom (Guanio-Uluru, 2019, p. 10), as they are the two most relevant to the book. The plant and animal watcher would be going through the book, looking at how the flora and fauna are described in the text and illustrations. They would be looking for instances where the characters or the plants around them are valued in any way outside human appraisal. They would quickly find that they do. The animals value themselves, sharing friendship, risking their lives for each other, and helping one another on their journey. The plants on the other hand are not treated so kindly. The humans destroy any ounce of flora they come across, and the animals lament their loss. If it is because of an intrinsic value, or if they mourn losing their home would have to be up to the pupils to discuss. The nature scribes would be tasked with looking for examples in the text of nature being described, whether that is the landscape or general environment. They would explore whether nature has a place in the narrative, or if it plays a symbolic role. The task is constructed to make the pupils engage with the text ecocritically, looking at how nature is depicted in the literature, and develop an understanding of how humans often view themselves in relation to nature.

While the reading of the book should be done in the English classroom, working with its content in other subjects would be very beneficial, as its topics of environmentalism and sustainability are a part of the national core curriculum in the Norwegian school system. As with the previous books, this one would fit very well in the social and natural sciences classrooms. In natural sciences, the topic could be about how the ecosystem works, and how humans often disrupt its balance, while in the social sciences, the issue of human development into nature could be a topic of discussion. These would be categorised as a part of the *about*-component of Sinnes' model (2021, p. 69).

In natural science lessons, some of the natural subjects to teach while working with this book would be the animal species we see, ecosystems, ecological destruction, and some of the concepts that appear in the book, like what a nature reserve is. Discussing ecosystems would entail diagrams of how each species relates to each other on the food chain, which would show how many of the characters in the story would normally be prey and predator. It would also be

informative to discuss how the environment is a crucial factor to the ecosystem, as we see when their habitat is destroyed in the first few chapters, and there is no way for the ecosystem to function. The populations of each species have diminished to a degree that is unsustainable. The teacher could put forth a hypothetical scenario to the class where the predators eat as they normally would, depleting themselves of their own food source. What would happen then? They would not survive either. The balance of the ecosystem is very vulnerable to interference from humans.

The ecological destruction portrayed in this book gives the reader insight into the immediate victims of such actions. While the animals are still in the titular woods, they are shown as struggling to survive, even before the bulldozers are in the immediate vicinity of their sleeping grounds, as the pond that functioned as the watering hole, as well as the home of Toad, was filled in. Bringing this up in a classroom discussion could be informative, in that it could make clear the fact that harming animals is not always a direct action. Polluting and disrupting habitats can have dire effects for an ecosystem.

One way of teaching using Sinnes' *in*-component could be to plan an excursion with the class, where they would take note of as many examples of humans dominating nature as they could find. Before the trip, the teacher would have to make the pupils aware of what this would look like. Examples would be areas where trees probably would have grown if there were no buildings or pavement. Pretty much anywhere humans have constructed anything are areas that would have needed to be cleared from forests, grass, or other greenery. Making pupils aware of how different their environment would have looked if humans did not destroy nature for their own habitation would be eye-opening, to say the least. While on this excursion, the pupils would experience their surroundings in a much more environmentally aware way. They would be able to see the effects of deforestation in their own neighbourhood. Before they started to live there, animals were probably the inhabitants of the area. That is not to say that the changes were regrettable; the purpose would be to give the pupils some perspective of what deforestation entails.

When deforestation is brough to its extreme, it can bring about ecological collapse, a topic which is discussed in the next book.

5.5 The Last Wild

The Last Wild is our longest book by far with 326 pages. It is almost completely composed of words, barring a few silhouette drawings at the start of each chapter and a guiding map at the start of the novel. The subject matter is more mature than most of the other works we have analysed and made pedagogical suggestions for, containing topics like capitalism, corporate greed, human destruction, and death. While topics like capitalism have been explored in Seeds of Change, and human induced ecological destruction is a big part of The Animals of Farthing Wood, these are further expanded upon in The Last Wild. In fact, human induced ecological destruction reaches such a stage that most animals are dead, and the remaining world is left as post-apocalyptic desolation. That is not to say that it is a depressing book. There are heartwarming and optimistic themes of friendship and teamwork as well; after all, it is a children's book. Bearing all these things in mind, it is clear that the book is more suitable for children at the end of their primary school experience. We therefore argue that the 7th grade would be the most appropriate grade to use this book in.

As with many environmental children's books, and also our own selections, it is logical that *The Last Wild* could be used in the natural sciences classroom. Biology might not be a subject of its own in primary school, but it is a part of natural sciences, and *The Last Wild* could be made excellent use of here. Part of the reason for why most of the animals have gone extinct, is because of the red-eye, or berry-eye, virus. This could provide the basis for a biology lesson on viruses; how they are formed and spread is important knowledge for everyday life. As reading the entire book in class would be very time-consuming and impractical, the pupils should be encouraged to read the book at home. If this would be hard to accomplish for some pupils, the first few chapters of the second part of the book contains specific information about the virus, and as a teacher one may turn one's pupils' attention to this instead.

The book could also be used to illustrate how ecological collapse can take place. The extinction of the animals is a significant example of how ecosystems work and depend on each other. If one major part of the food chain disappears, this has ripple effects on the rest of organic life. In the cities of *The Last Wild*, a replacement sustenance known as formula is commonplace, but outside the cities there are instances of cannibalism. This is an extreme example of ecosystems breaking down, but it could be useful in starting a conversation with your pupils about how important sustainability is. This conversation should naturally be in English to increase the pupils' English proficiency. Overfishing and poaching are examples of how

humans act unsustainably towards their environment which can have serious consequences. It is important for one's pupils to understand humans' place in the world; we are part of nature and not above it. Having a conversation around this would tie in with the *about*-component of Sinnes' teachings (2021, p. 69), and could lead to one's pupils attaining a higher understanding of what sustainable development is and how important it is for life's continued survival.

The Last Wild could also be useful in the English classroom. As the pupils are starting to get older and more adept at reading, we propose that literary analysis would be a good option. One could, as the teacher, organise lessons around different, note-worthy chapters of the book, and dissect them along with the pupils. The goal would be to look out for what messages the book is sending, as well as the themes it contains. Having the pupils analyse the book would be useful for a number of reasons. Firstly, it would educate them in extracting the meaning and content from a text, which is always useful in everyday life. It would also have the added benefit of them implicitly learning about environmentalism and sustainability without the teacher having to specify it. This way, the lesson would have the intended goal of learning for sustainable development, the for-component of ESD (Sinnes, 2021, p. 70). The teacher would have to guide the pupils towards the most meaningful areas of the text, but after that the pupils would be the architects of their own learning.

As with Seeds of Change and The Animals of Farthing Wood, we believe that using literature circles in the English classroom could be beneficial for The Last Wild. The pupils would be organised into groups of four each, with each group being assigned a different chapter to read. The roles assigned to the pupils would, again, be based on the roles that Guanio-Uluru (2019) describes in her study, and they are nature scribe, plant and animal watcher, dystopian detective, and biotechnology detector (p. 10). In this case, unlike with the two previous books, we would be making use of all the roles, as The Last Wild clearly has themes of dystopia and technology being used to enhance or affect nature. As with the other books, the pupils would read their group's assigned chapter with their individual role in mind. Afterwards, the teacher would encourage the groups to hold a conversation in English amongst themselves about what they found. This exercise would also be in accordance with Sinnes' learning for sustainable development-component (2021, p. 70), as the pupils would actively be on the lookout for how the plot in the book is representing environmentalism and sustainability.

As with *Seeds of Change*, *The Last Wild* contains messages and criticism of capitalism and corporate greed, and how it can lead to ecological decline. This could make the book act as a

basis for a social sciences lesson. Using the book in this setting would build on the pupils' preexisting knowledge and experience from their previous years of working with the topics, as they would have worked with Seeds of Change. In this case, we would have the pupils interact more with the topics. They would have read the book at home over a period of time, or had it summed up to them when applicable, such as in the cases for pupils with learning difficulties. In the classroom, the teacher would read aloud relevant passages for the topics of capitalism and corporate greed. An example would be near the end of the book, where Kester's father explains why the world is in such disarray, as he tells Kester in no uncertain terms that the greed of people in power is to blame. This passage would serve as the basis for what could be a project by pupils divided into small groups. They would be encouraged to find out more about climate justice (Damico et al., 2020), or rather climate *injustice*. The teacher would task them with creating a presentation about the subject of climate justice and how unfair ecological decline is, and then present it for the rest of the class. This would have the effect of having the pupils create their own material and, in turn, activate their own learning. It would also encourage teamwork, which is always useful in everyday life. The proposed lesson would tie in with the as-component of ESD (Sinnes, 2021, p. 70), because the lesson would be learning as sustainable development. The pupils would become more aware of the environmental and social issues that are prevalent in our society and know more about the reasons behind it.

All in all, it is clear that these books have great potential for classroom application. Each book holds merit on their own, with positive themes and messages to be learnt. However, applying the books so that they build on each other, such as we have suggested, could have a compounding effect on how the pupils assimilate the topics of environmentalism and sustainability into their consciousness.

6. Conclusion

6.1 Our thesis' journey

This thesis was born from a need to address the various environmental changes happening to our planet. It is clear that the earth is being negatively affected by the actions of us humans; sea levels are rising, the average global temperature is increasing, and several species are under threat of going extinct due to these changes (IUCN, 2021). We, as this thesis' authors, wanted to explore an area where we could make a difference. We chose to use literature as our focus in this endeavour, to find out how some selected works of environmental children's literature (ECL) could be beneficial in the pursuit of building a better future. We should again make clear that we do not claim that our project is revolutionary in the fight against climate change; we only aimed to use relevant literature to address the environmental problems we face as a species.

Throughout the thesis, we have explored and learnt a number of things relating to environmental matters. We have showed that much of ECL is limited in its portrayal of environmentalism, with many ECL works being solely focused on *private environmentalism*. We argued that there should be more books with a focus on *social environmentalism*, such as *Seeds of Change: Planting a Path to Peace* (Johnson, 2010). We also argued that some ECL works are positive even though they are not written with the intention of portraying *social environmentalism*, because they are instead focused on depicting nature in its own right in order to amaze and inspire children. *The Very Hungry Caterpillar* (Carle, 1969) is an example of an ECL book of the latter variety.

We have explored the fact that general discourse in Western society is often implicitly negative towards the environment. In capitalist society, economic growth is often considered the goal for humanity, regardless of how this pursuit can affect the environment. As we have shown, this is reflected in the discourse around us. We have argued that resisting this discourse is crucial in order to help create discourse that is more positive for the environment.

We performed critical discourse analysis of our five selected books, with the aid of ecolinguistics and multimodality. Our first research question guided us in our analysis of the books:

"How is nature, and its relationship with humanity, portrayed in the following books: Eric Carle's *The Very Hungry Caterpillar*, and *The Tiny Seed*; Jen Cullerton Johnson's *Seeds of Change: Planting a Path to Peace*; Colin Dann's *The Animals of Farthing Wood*; and Piers Torday's *The Last Wild*?"

We found that, overall, nature is portrayed positively in these books. The Very Hungry Caterpillar had a clear focus on portraying nature in its own right, while the other books struck tones of environmentalism to a higher degree. The Tiny Seed portrayed the world as generally hostile to the seeds' campaign, with human actions being the most reproachable, despite there being no malice. Seeds of Change had a strong socially environmental message; this book highlighted to its readers the environmental responsibility of governments and corporations while critiquing their shirking of these responsibilities. The Animals of Farthing Wood presented deforestation from the animals' point of view, showing how humans strive to expand their sphere of influence, even if fauna suffer the consequences. The animals' endeavour to persist living, through cooperation, in order to make it to a safe space, parallels our own efforts as humans facing a cataclysmic threat, having to work together to save our only habitable planet. The Last Wild had a noticeable focus on climate justice. The animals in the book succumbed to the red-eye virus or were hunted down; either way, the humans' environmental and capitalist actions lead to the animals falling victim. Torday gave a voice to the voiceless; he demonstrated that working together to oppose injustices can make a positive difference.

Our second research question guided us when discussing how to apply the selected books to the primary school classroom:

"In what ways can teachers use these books to teach primary school pupils about environmentalism and sustainability?"

We had several suggestions for how these books could apply to the classroom. We found that all the books have a high potential for use surrounding topics like environmentalism and sustainable development. We suggested that our selected books could be used in the grades in accordance with the books' target age group, for the highest relevance and efficacy. As the pupils would become familiar with aspects of nature and biology, discussions and groupwork with more mature topics would ensue to provide a sensible learning curve. We would like to, again, point out that these were hypothetical suggestions and we do not have concrete results to point to. We merely state that, given our analysis of the discourse in the books, they could be environmentally and sustainably beneficial in any classroom.

6.2 The road ahead

As we have discussed, there has been significant research performed on the subjects of discourse, ecolinguistics, and on the portrayal of environmentalism in ECL. Much has been said about how children can be exposed to the important subjects of environmentalism and sustainability; however, we note that there is a considerable lack of research on these topics applied to a classroom context. As our project is hypothetical, it does not contain a case study of how this would look like in a classroom. We therefore hope to see more practical research done in this field in the future.

We would also like to see more ECL portraying *social environmentalism*. The hope is, as time progresses, authors of ECL will tweak their ecosophies to line up with more sustainable themes in their works. Recycling is all well and good, but there are more environmentally conscious messages to send.

Looking ahead, we also hope that other teachers or student-teachers who might read our thesis can be inspired by what we have detailed here. Perhaps they may seek to incorporate some of our suggestions into their own classroom; if so, this would accomplish some of what we set out to do. If other researchers come across this thesis and decide to pursue an academic approach in implementing our suggestions, this would naturally go a long way towards filling the current gap in research we mentioned.

We are under no illusion, however; these things are unlikely to occur. Our best hope is to try it out for ourselves when we enter the world of teaching full-time.

6.3 Final thoughts

As Guanio-Uluru's (2019) study found, student-teachers generally do not feel confident in their understanding of or ability to teach sustainable development in their future as teachers (p. 16). Throughout our course at the Western Norway University of Applied Sciences [Høgskulen på Vestlandet], this was our experience as well. We felt there was a gap in our pedagogical competence, and we wished to address this. We were already aware of the importance of sustainability, but we wanted a more comprehensive understanding of the topic. We felt this was necessary in order to gain knowledge and feel more confident about it, so we could more effectively teach our future pupils on the matter.

This was our feeling at the start of working on our thesis. As we have continuously worked throughout the semester, we have only gained more of an appreciation of the importance of teaching environmentalism and sustainability. Our eyes have been opened more on the topic of climate justice as well, and we now have a new perspective on how discourse can have an impact on society.

It is our opinion that we have only begun to scratch the surface of what is possible to accomplish in service of a more sustainable and environmentally conscious society. We believe that literature is a beneficial tool in helping the next generation take care of the planet, but it is simply a start; more research must be done, and more practical application in the classroom must be performed. If we come together and keep working, perhaps we can start building towards a better future.

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